

PEACE RIVER DISTRICT, OUTLET

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HOUSE OF COMMONS

SELECT STANDING COMMITTEE ON

RAILWAYS, CANALS AND TELEGRAPH LINES

Various Proposed Railway Routes for a Western
Outlet to the Pacific from the
Peace River District

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 1—TUESDAY, MARCH 15, 1927

WITNESSES:

Mr. J. G. Sullivan, Consulting Engineer, Canadian Pacific Railway Co.

Mr. C. S. Czowski, Chief Engineer, Construction Department, Canadian National Railways.

Mr. E. M. M. Hill, Exploration and Locating Engineer, Can. Nat. Rlys.

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1927

MEMBERS OF THE COMMITTEE

FRANK S. CAHILL, Esq., *Chairman*,

A. MACGILLIVRAY YOUNG, Esq., (Saskatoon), *Acting Chairman*.

Messieurs

Anderson (<i>Halton</i>),	Gardiner,	Mathews,
Anderson (<i>Toronto-High Park</i>),	Geary,	Maybee,
Arthurs,	Gershaw,	Mercier (<i>Laurier-Outremont</i>),
Auger,	Girouard,	Mercier (<i>St. Henri</i>),
Bell (<i>St. Antoine</i>),	Glen,	Millar,
Bell (<i>St. John-Albert</i>),	Goodison,	Milne,
Bennett,	Gott,	Morin (<i>Bagot</i>),
Bettez,	Goulet,	Neill,
Blatchford,	Guerin,	Parent,
Bothwell,	Hanson,	Perley (Sir George),
Bourgeois,	Harris,	Pettit,
Bowen,	Heaps,	Pouliot,
Boys,	Hepburn,	Price,
Bradette,	Hocken,	Rennie,
Brown,	Howard,	Robitaille,
Cahan,	Howden,	Ross (<i>Moose Jaw</i>),
Cahill,	Jelliff,	Rowe,
Campbell,	Jones,	Ryerson,
Cantley,	Kay,	St. Père,
Casgrain,	Kellner,	Sanderson,
Casselman,	Kennedy,	Séguin,
Charters,	Lacombe,	Simpson,
Church,	Lacroix,	Smith (<i>Cumberland</i>),
Cotnam,	Laflamme,	Smith (<i>Stormont</i>),
Cowan,	Lanctôt,	Speakman,
Delisle,	Lapierre,	Spence (<i>Maple Creek</i>),
Denis (<i>Joliette</i>),	Lavigueur,	Spencer,
Denis (<i>St. Denis</i>),	Letellier,	Stevens,
Dionne,	Lovie,	Stewart (<i>Leeds</i>),
Donnelly,	Lucas,	Stirling,
Drayton (Sir Henry),	Luchkovich,	Sylvestre,
Dubuc,	MacDonald (<i>Cape Breton South</i>),	Taylor,
Duff,	Macdonald (<i>Kings</i>),	Thorson,
Dunning,	MacLaren,	Tobin,
Dussault,	MacLean (<i>Prince</i>),	Totzke,
Embry,	McIntosh,	Tummon,
Edwards (<i>Waterloo</i>),	McKenzie,	Vallance,
Esling,	McLean (<i>Melfort</i>),	Verville,
Evans,	McPhee,	Ward,
Fafard,	McQuarrie,	White (<i>Mount Royal</i>),
Fansher (<i>Lambton East</i>),	Maloney,	Wilson (<i>Wentworth</i>),
Fansher (<i>Last Mountain</i>),	Manion,	Young (<i>Saskatoon</i>),
Fraser,	Marcil,	Young (<i>Weyburn</i>).—129.

[Quorum 25]

ORDER OF REFERENCE

Ordered,—That the Select Standing Committee on Railways, Canals and Telegraph Lines be empowered to examine and inquire into all such matters and things as may be referred to them by the House; and to report from time to time their observations and opinions thereon, with power to send for persons, papers and records.

Attest.

ARTHUR BEAUCHESNE,
Clerk of the House of Commons.

MONDAY, February 14, 1927.

Ordered,—That the following Resolution be referred to the said Committee:—

That, in the opinion of this House, the time has arrived for the commencement forthwith and the completion in the near future of a direct railway outlet from the Peace River Country to the Pacific Coast.

Attest.

ARTHUR BEAUCHESNE,
Clerk of the House of Commons.

EXTRACT FROM SECOND REPORT OF COMMITTEE

A resolution has been referred to the Committee in respect to a direct railway outlet from the Peace River Country to the Pacific Coast. Your Committee recommend that 300 copies in English and 100 copies in French of the evidence to be taken by the Committee in connection therewith be printed for the use of the Committee and of the House of Commons, and that Rule 74 be suspended in relation thereto. (*Votes and Proceedings, 4th March, 1927.*)

AUTHORITY TO PRINT EVIDENCE

On motion of Mr. Young (Saskatoon), it was ordered,—That, in accordance with the recommendation contained in the Second Report of the Select Standing Committee on Railways, Canals and Telegraph Lines, 300 copies in English and 100 copies in French of the evidence to be taken by that committee respecting a direct railway outlet from the Peace River Country to the Pacific Coast, be printed for the use of that committee and of the House of Commons, and that Rule 74 be suspended in connection therewith. (*Votes and Proceedings, 4th March, 1927.*)

MINUTES OF PROCEEDINGS

TUESDAY, 16th March, 1927.

The Committee met at 11.00 a.m., Mr. Young (Saskatoon), Acting Chairman, presiding.

Present: Messrs. Anderson (Halton), Anderson (Toronto-High Park), Blatchford, Bothwell, Bowen, Bradette, Brown, Campbell, Casselman, Donnelly, Duhue, Dunning, Dussault, Embury, Evans, Fafard, Fansher (Lambton East), Fansher (Last Mountain), Fraser, Gardiner, Gershaw, Gott, Hanson, Heaps, Howard, Howden, Jelliiff, Jones, Kay, Kellner, Kennedy, Lanetot, Lapierre, Lovie, Lucas, Luchkovich, MacLaren, McIntosh, McKenzie, McLean (Melfort), McPhee, McQuarrie, Manion, Mercier (Laurier-Outremont), Mercier (St. Henri), Millar, Milne, Ross (Moose Jaw), Ryerson, Smith (Cumberland), Spencer, Stevens, Stirling, Taylor, Ward, Young (Saskatoon), Young (Weyburn)—57.

The Committee proceeded to the consideration of a report made by Messrs. Sullivan, Czowski, Fairbairn, James, and Hill, engineers of the Canadian National and Canadian Pacific Railways, on various proposed railway routes for a western outlet to the Pacific from the Peace River District.

Hon. Mr. Dunning, Minister of Railways and Canals, announced the desire of the Government of British Columbia to make representations to the Committee.

Mr. John G. Sullivan, Consulting Engineer, Canadian Pacific Railway, was called and examined. Witness retired.

Mr. C. S. Czowski, Chief Engineer, Construction Department, Canadian National Railways, was called and examined. Witness retired.

Mr. J. M. R. Fairbairn, Chief Engineer, Canadian Pacific Railway, was called. Witness retired.

Mr. E. M. M. Hill, Exploration and Locating Engineer, Canadian National Railways, was called and examined. Witness retired.

At Mr. Kennedy's request, the engineers who prepared the report will supply maps for distribution to members of the Committee.

The Committee adjourned at 1.00 p.m. until Friday, 18th instant, at 11.00 a.m.

MINUTES OF EVIDENCE

ROOM 231, HOUSE OF COMMONS,
WEDNESDAY, March 16, 1927.

The Select Standing Committee on Railways, Canals and Telegraph Lines met at 11 A.M., the Acting Chairman, Dr. A. M. Young presiding.

The CHAIRMAN: Gentlemen, we will come to order. The first item is:

Consideration of the Report made by a Joint Board of Engineers of the Canadian National and Canadian Pacific Railways on Various Proposed Railway Routes for a Western Outlet to the Pacific from the Peace River District.

Now we set apart this morning to have this report before us, and we have asked the engineers to be here, and they are here. Is it the desire of the committee to hear the engineers first?

Mr. KENNEDY: Mr. Chairman, I would suggest that the engineer who knows the various routes best should undertake to explain these various routes to us. Then we can ask questions as we go along, and after that we can deal with some of the questions regarding the conclusions to which the engineers have come in their report, and the basis of the whole thing. That is my suggestion.

Hon. Mr. DUNNING: There is one matter, Mr. Chairman, which I think I should communicate to the committee. I have a telegram from the Prime Minister of British Columbia asking when this committee will sit, and asking to be informed of its proceedings, and if there would be an opportunity for the government of that province to be represented. I replied to the effect that I would communicate the desire of the government of British Columbia to the committee, requesting to be advised as to when it would be convenient for the government of British Columbia to be here in order that the committee could decide as to whether or not it would extend the hearing long enough to permit of such representations being made. I have not a reply as yet. I mention that now because of the fact that it may have a bearing upon the later sittings of the committee, if the committee decide, of course, to permit such a hearing.

The CHAIRMAN: We have a report from the engineers, which I see is signed by several of them, and I suppose in a way the report speaks for itself. I think it might be advisable perhaps if we take first the gentleman who first signed the report, and if he wishes to explain more or less in detail to the committee this report, then perhaps he could be examined on any portion of it. Mr. Sullivan is the man who first signed the report.

Mr. JOHN G. SULLIVAN, called:—

WITNESS: Mr. Chairman and gentlemen: I do not want to take up the time of this committee, but as far as this report goes I can readily understand how there may be a lot in that report which a layman cannot understand. Our president told me after we made it—and he read it for two nights—that he thought it was a very good report, but was too technical. I said it is for the best lawyers in the country, and the best engineers, and they ought to be able to put it in such shape so that people will understand it.

All I have to say for the report is that we spent a great deal of time on it, carefully weighed all the points and drew our conclusions from the deductions, and I think it speaks for itself. If there is any point there where our language is not plain, I will try to put it as plain as I can, if you will ask me what you want explained.

By Mr. Kennedy:

Q. Mr. Sullivan, you are the engineer who signed here as J. G. Sullivan, consulting engineer for the C.P.R.?—A. Yes, sir.

Q. In the preparation of this report were you out over the routes yourself?—A. No, not over the different routes, but I have been in the Peace River country on two or three occasions.

Q. Will you tell us where you were and just what your personal knowledge is regarding this?—A. I had been at Spirit River and all over the railway lines and before the line was extended west from Peace River drove from Peace River to Spirit River and crossed the main river at Dunvegan, I think it was, and drove from there down to Spirit River and then went over all the railway lines.

Q. I take it then you have not been over any of the railway routes proposed, either the route to Obed or the route by Monkman Pass and over the Stewart?—A. No.

Q. There must have been one or more of newer engineers who went over these routes?—A. We had reports from various engineers accessible who had gone over these routes, yes.

Q. Were any of the five engineers signing this report, Messrs. Sullivan, Czowski, Fairbairn, James, and Hill over any of these routes?—A. I think at least two of them had been over some of them, if not all of them.

Q. Who were they?

Hon. Mr. DUNNING: They will answer for themselves.

Mr. SULLIVAN: I am sure Mr. James was over one, and I think Mr. Hill was over nearly all of them—or over several of them.

By Mr. Kennedy:

Q. The very first paragraph of this report reads:

The undersigned were instructed to outline the engineering and economic features of the various proposed railway routes for a western outlet of the Peace River country to the Pacific coast.

Who gave you those instructions?—A. Mr. Grant Hall, as far as I am concerned.

Q. Did that cover the instructions of the other C.P.R. engineers, yourself and Mr. J. M. R. Fairbairn, and Mr. W. A. James?—A. Well, Mr. James is reporting to Mr. Coleman; I do not know whether it was Mr. Coleman or Mr. Hall who gave him the direct instructions.

Q. Grant Hall gave you instructions?—A. I am inclined to think Mr. Coleman asked me to go to Montreal and report to Grant Hall to get instructions, yes.

Q. On the first page of this report, I find this paragraph:

The reason this subject is being discussed is the general opinion of the settlers in the Peace River district, who, without any study or thought as to whether or not their business can afford the cost, believe that if there was constructed a shorter railway to the Pacific coast that they would be entitled to, and would obtain lower freight rates.

I do not know whether you will agree with me or not, but I think it is stated in the report, or the conclusion is that they would not be entitled to these lower rates because the fixed charges as a result of the cost of construction would be levied against the local traffic and, therefore, would make it impossible to give lower rates. Can you tell me of any case in Canada where a railway was built and where the fixed charges were charged up in that way to the traffic that was immediately developed in the district that was immediately served from the start?—A. Well, Canada is loaded with a pretty big debt on account of building railways where the traffic did not justify or did not begin to justify, the expenditure.

[Mr. J. G. Sullivan.]

Q. I have no objection to that statement because I believe that myself, but what I did ask you is: can you tell me of a single case where this principle has been applied in connection with the construction of railways, anywhere in the Dominion of Canada?—A. Well, for a number of years I was in charge of construction for the Canadian Pacific Railway and we never put money into a line that we did not think that ultimately the general result would be economical.

Q. Well, when you say "ultimately" what do you mean by that?—A. I mean, within a reasonable space of time.

Q. What would you regard as a reasonable space of time?—A. It would depend on the size of the project; might vary from three to four to ten or fifteen years, according to what the future might develop.

Q. I take it from your answer that you would not say a line was not justified because the traffic immediately available would not take care of the fixed charges?—A. I would say this; when the total revenue from the district would not pay the fixed charges, to say nothing about the operating costs, then I would say that I would not recommend such a line.

Q. Since when has this new principle been applied in the location of railways in the Dominion of Canada and the construction of railways?—A. I do not think that the principle was ever varied from; it was always I think, the predominant principle, that the ultimate traffic coming to the roads would pay, not only the operating expenses, but pay the interest on the cost of construction.

Q. The ultimate traffic?—A. Well, we know that in a new business starting up you cannot hope to pay dividends the first year.

Q. Would you admit that even though the traffic in the Peace River country could not pay the fixed charges in connection with this railway, that would not be any reason for saying the road was not justified?—A. The Peace River country has railway connection, and what we actually said was that no further expenditure was justified at the present time.

Q. Yes, the Peace River country has railway connections, but I think you will admit, or will you admit that they are not good connections?—A. No, I will not admit that.

Q. You would say then that people who are located eighty miles from the end of a railway have good railway service?—A. That is a local matter which will have to stand on its own feet. As to the extension, there may be people 100 miles from a railway who have not got the business or never would have the business to justify extending to them. The Canadian Pacific Railway have built a good many lines where there were very few people. For instance, I remember the Nicola-Regina line; when we built that I travelled one night from six o'clock to twelve o'clock before I got to a shack where I could stay all night. Of course we were not travelling in automobiles as we do now; we were travelling by team. That country and that line is paying now, and that was built in 1903 and 1904.

Q. Coming back again to this fourth paragraph:

The reason this subject is being discussed is the general opinion of the settlers in the Peace River district, who, without any study or thought as to whether or not their business can afford the cost, believe that if there was constructed a shorter railway to the Pacific Coast that they would be entitled to, and would obtain lower freight rates.

Can you tell me, Mr. Sullivan—of course, you are an engineer and possibly you have not given so much thought to the rate question as some of the rate experts who were before the Railway Commission—but can you tell me why the settlers in the Peace River district would not be justified in looking for lower rates, if they were brought within 800 or 900 miles of the Pacific Coast.

than they have to-day when it is necessary to haul their products about 1,200 miles to reach the Pacific Coast?—A. I think a pretty good answer to that question would be this; that to-day—you will correct me if I am wrong—your rates are 26 and 28 cents per 100 pounds; that rate over the lines on which the traffic is hauled, on the C.P.R. line, for instance, is less, or about four and a half mills per ton mile. If you spend what we figure would be the minimum expenditure, the fixed charges would be considerably more than that per ton mile, not on the business you have got but on three or four times the business that you have at the present time that would go to the Pacific Coast.

Q. In other words, you are coming back to the question that the additional cost of this outlet must be charged up against the local traffic?—A. Well, possibly not every cent of it to start with, but, as I said in the first place, when the fixed charges are a great deal more than the total revenue, I cannot imagine any business man or any government desiring to spend money on such a project.

Mr. KENNEDY: Possibly some of the other members of the Committee might have questions to ask of Mr. Sullivan but, as far as I am concerned, I would like to go on to the question of the various routes and the cost, grades, and so on, so that we can compare rates, and then I would like to go into some of these questions.

By Mr. Fraser:

Q. You have been over the Pacific Great Eastern road, I understand?—A. Yes, sir.

Q. From Prince Rupert to Prince George?—A. Yes.

Q. In the consideration of these different routes I am interested in this fact; from Lillooet to Squamish you eliminate entirely the road which is at present constructed and operated. I would like to know why you eliminate that from all connections with the line from the Peace River to the coast?—A. In our report?

Q. Yes, in your report?—A. Well, the principal reason is that Squamish was not considered best as the real terminal.

Q. Certainly not; Vancouver is the real terminal. Why would that not form part of the outlet from the Peace River country to the coast?—A. The building of that piece of line was very very expensive and it would be just about as cheap to cut out from Lillooet, or possibly from Clinton, either one of the two main lines, and avoid hauling over that hill between the Fraser River and the Pacific Coast, going by way of Squamish. In making an economic study, the most economical machine you can get is one where the fixed charges plus the operating expenses are the minimum.

Q. The thing that puzzles me is this; there is that road actually in operation and still no consideration is given to that fact at all; you do not have to spend any money on that road but on the other road you have got to spend every dollar?—A. Yes, you have to construct a line. If you will admit that Vancouver would be the terminal you would have to build a line from Squamish to the connection, which would cost practically as much—I cannot say off-hand—but it would cost nearly as much as constructing a connection from Clinton or from Lillooet to the main line. Especially it would be more economical to do that when you take into account the final operating cost on the two roads.

Q. Take the Peace River Pass, which I am more interested in. Your report says that the maximum grade for a proper outlet to the Peace River country, for the maximum traffic, not the minimum, will be a grade of 0.4 or 1.00 per cent?—A. I do not think we said that. Can you refer me to that?

Q. On page 7 of the report, Mr. Sullivan; "Gradients against outgoing traffic Fraser river to Vancouver. For Assumed Initial Traffic—0.4 per cent. For

Assumed Maximum Traffic—0.4 per cent.”—A. Well, that refers, sir, to the low-grade lines, an entirely new line; abandoning the P.G.E. and building a water-grade line down the Fraser river. We do not assume the grade; we know what the grades are. The assumption was on the traffic, not the grade, sir.

Q. Well, has the grade nothing to do with the outlet for the Peace River country?—A. Certainly.

Q. My point is this; you are satisfied with that statement that there is a 0.4 per cent grade that can be got from the Peace River country to Vancouver?—A. By way of a new line down the Fraser river.

Q. Well, all right, we will let that go for the moment. My contention is this; that there is a line in operation?—A. Not 0.4 per cent.

Q. No, I did not say all 0.4 per cent—and the present line can be improved to 0.4 per cent; you do not have to construct an entirely new line?—A. Oh, no. You can build a 0.4 per cent line in places but when you are crossing a summit and you cannot reduce the summit—I make this statement generally—you are increasing the cost of operation by lowering the grades. For instance, coming from Squamish up to that pass you would have—

Q. Just a moment.—A. Wait a moment; you are trying to put words into my mouth. When you say that you can improve the present line I want to show you how ridiculous it is. It is not economical. For instance you get a two cent grade up there and to make it 0.4 per cent you would have a line five times as long and that, you know, would not be economical.

Q. I did not attempt to put any statement into your mouth, Mr. Sullivan?—A. But you were misreading it.

Q. And I am not going to allow you to put statements into my mouth?—A. You did say that the present line could be improved and I want to show you how absurd such a statement is.

Q. I was talking entirely about the Fraser river road that you have in this; I was not talking about the Squamish end of it at all. I was talking about the Fraser river road that you have there and that is part of the P.G.E. road, as you know. From Fort George to Lillooet the line follows generally the Fraser river and at Lillooet it leaves the Fraser river?—A. No, that is not true, either; you see from Lillooet you go away up and you—

Q. It leaves the Fraser river?—A. —and you get into the other watershed entirely.

Q. But it leaves the Fraser river—that was the statement I made—at Lillooet?—A. Yes, both of them going in either direction.

Q. It follows the Fraser River down to Cisco, to the connection with the C.N.R. and C.P.R.?—A. The 0.4 line has nothing whatever to do with the P.G.E. with the exception of probably the first forty miles out of Prince George. We were instructed to find out the best route and we made a study of all these routes and of the low-grade line which you are referring to here via the Fraser River, a new line right down to Cisco.

Q. Would you say that the present Pacific Great Eastern Railway from Prince George to Soda Creek, a distance of 150 miles, would have to be abandoned in order to find a 0.4 grade?—A. Yes; there is some two per cent grade on that section.

Q. The whole thing would have to be abandoned?—A. No, I do not say that.

Q. It would only have to be abandoned at points?—A. At certain places, yes.

Q. According to this report the average grade via Obed is 0.5, that is one-tenth of one per cent higher?—A. We have shown the grades there; I think that is about right.

Q. And the grade via Monkman Pass is 0.75?—A. It is not quite fair to say that. The maximum grade would be 0.75 but that would probably only be for a distance of 20 or 30 miles; at the outside, a distance of maybe 100 miles.

Q. The point I am trying to get before the Committee is this; that, according to your report, the route via the Fraser River from the Peace River to Vancouver is the most favourable?—A. Oh, yes, I guess we will agree on that.

Q. I take from the report that the Peace River Pass is the most favourable route. Then the average distances of the three routes; via Obed is 909 miles, which is the shortest; Monkman Pass is 926 miles; and via the Peace River Pass is 961 miles?—A. You are right on that. They were just the miles of new construction but I see on page 5, the mileages are given.

Q. From the Peace River to the Pacific Coast is practically a thousand miles. Now, what is the distance from the Peace River country to Montreal, for instance, or to the head of the Lakes, roughly?—A. Well, I would not like to tell you that off-hand; I do not try to carry figures like that. You can get them from any Time Table.

Q. I do not suppose you know anything about the present rates from the Peace River country to Vancouver and to Montreal?—A. No, I could not tell you that.

Q. I cannot find in this report any figure given for the summit of Monkman Pass; what is the elevation of the Monkman Pass?—A. It is not given?

Q. It is not in the report; I have searched carefully from one end to the other. —A. You can get that from Mr. Hill or Mr. Czowski; I have not got it with me here.

Q. Do you know the summit of the Fraser River Pass?—A. You mean the Peace River Pass?

Q. Between the Peace River and the Fraser?—A. That is given in our report; that is practically the lowest pass from the Panama to that point.

Q. That is just exactly the point I want to make—2,350 feet?—A. Something like that, yes.

Q. Where do you cross the Fraser River at Aleza Lake; do you build a new bridge or do you go across on the present Transcontinental Bridge?—A. Mr. Hill will be able to answer that question.

Mr. C. S. Czowski, Chief Engineer of Construction Department, C.N.R. called.

By Mr. Kennedy:

Q. You are the Chief Engineer of the Construction Department of the C.N.R. who signed this report?—A. I am.

Q. Who gave you your instructions regarding these surveys?—A. Mr. S. J. Hungerford.

Q. Were you over any of these routes?—A. No.

Q. The routes recommended—none of them?—A. Not the outlets.

Q. Well, in what way did you come to the conclusions that you give in this report?—A. By working out the figures that are shown in the report.

Q. I would like to ask you regarding the fourth paragraph in the report. I do not think we need read it again. It seems to me that that paragraph states this; that there will be certain costs in connection with building an outlet that will be charged up against the local traffic of the Peace River country and which will prevent any lowering of freight rates even though it means cutting off a certain mileage, estimated at around three or four hundred miles between the Peace River country and the Pacific?—A. Well, Mr. Kennedy, the object of this report, when made, was not to decide, so far as we were concerned, whether an outlet was to be built at all or not; the object of the report was to give all the facts that we could find to our executives, the Presidents of the two railroads, so that they would be informed of the whole situation. That was the whole object of the report. It is a natural expectation on the

[Mr. J. G. Sullivan.]

part of the local people that with the shorter route they would get a lower rate, and later in the report we assume that the lowering they would expect might be nine or ten cents; that was the object of that statement in the report.

Q. You jumped at that conclusion?—A. Yes. We were wrong, because I understand the reduction has been more than that; 12 cents, already. We showed a picture of what would be the financial result and we made that nine and ten cents reduction.

By Mr. Fraser:

Q. Can you give me the elevation of the Monkman Pass?—A. The Monkman Pass is about 3,700 feet.

Q. About the same as the Pine River Pass?—A. No, I think the Pine River is a little lower. May I make a statement?

The CHAIRMAN: Yes.

Mr. CZOWSKI: Mr. Fraser is trying, as he says; to put before the Committee various salient facts in connection with each of these routes. We did more than that in this report. We gave economic studies in tables Nos. 1 and 2 and attempted to take all the fixed grades, elevations, distances, and everything, as by that process of that economic study we took into account all these various factors and arrived at the results shown. You cannot just put three factors down and say, "Elevation is No. 1; grading is No. 2; and distance is No. 3," and then add them together and take an average; you have got to weigh each one and find what value there is to each factor.

By Mr. Fraser:

Q. You have submitted a map with this report in which you have certain districts outlined; that map does not accompany this report?—A. I am not to blame for that, of course.

Q. I have not been able to study the report from that standpoint for the simple reason that the map does not accompany it?—A. I am sorry; I am not responsible for that in any way.

Q. I am only explaining why I am trying to get the salient facts?—A. But you do not need the map for this, Mr. Fraser. Table No. 1 and Table No. 2, if you will take the time to look at them, give the whole thing. We show how many miles there are of each kind of grades, whether it is 0.4, 0.5, 1.00 per cent; we show the number of ton miles that have to be hauled over these various gradients; everything is given in those two tables. I can get more out of a map when I see the illustrations than I can out of a page of argument. I would move, Mr. Chairman, that we have these maps printed and distributed, because I think it would help us to understand the various routes much better.

Mr. ROSS (Moose Jaw): I would like to ask if, in your opinion, Mr. Czowski, you can expect within a reasonable time that traffic in that country will warrant the expense of this line?

Mr. CZOWSKI: That is what our report purported to show, and to say that at the present time we cannot see traffic that will warrant this cut-off. We really treat it as a cut-off. There is a railway in that district, substantially 200 miles farther to go, and that is what this was based on, and consequently we look at it rather as a cut-off, and not as a railroad built to open up a new country, but simply as a cut-off, to see whether it was more economical to handle it that way than over the longer route. We always recognize the fact of the railway being built into a district, but we are referring to this as a cut-off and not a new line into the country, but another way out of it. We showed it will take a lot of traffic to justify that, and we went even farther than that and

showed it was more economical, no matter who owned the present route, to operate via the present route until there was a great number of times the present traffic.

By Mr. Fraser:

Q. In regard to the question of distances, on page five of your report you have the average distances that traffic is hauled from Vancouver via Monkman Pass—
A. That would not be on page five, would it?

Q. Yes, it is on page five. I have the page in front of me. It is on the second last line, 864 miles for the assumed initial traffic. How do you get that mileage?—
A. We got that from table number one. If you will figure the distance—if you take it from one point it is one distance, and from another point it is another distance, and you have an innumerable number of distances in the Peace River country. In order to weigh that distance, we figured the number of train miles, and that not only gave a weight to the particular point in distance, but also in quantity; therefore we divided the district up into seven zones and we presumed to set a particular tonnage to that zone, and selected a centre of that zone and calculated the mileage and applied the tonnage to Vancouver or Prince Rupert, or Stewart, or whatever the destination would be. In other words, we worked out the total number of gross ton miles, and divided the gross ton miles by the gross tons, and that gave us the weighted distance.

Q. I understand from that that the mileage I find here has no relation whatever to the mileage the railways would have to construct?—
A. We give that as well, but this is the weighted distance that the traffic we assumed would have to travel to the points given.

Q. The distance the traffic would have to travel—the average weighted distance?—
A. That is it. The average weighted distance the assumed traffic would have to travel to the destination point we named. We give the number of miles to be constructed on tables one and two, and they are summarized, I think, on tables three and four.

Q. Table two is the one I am looking at, the 864 miles.—
A. No, that is not the numbered table; that is the one detailed in the statement. The table I refer to is opposite page 24, and if you will look at that you will see we give the number of miles to build in each case—

Q. The reason it aroused a question in my mind is this; I am very familiar with the different distances out there, and I questioned the distance the moment I put my eyes on it. For instance, I make it from Wembley to Vancouver 705 miles, while you say it is 864.—
A. We cannot select Grand Prairie or Wembley or Spirit River or any of those points and say that this is the distance; we have to treat it as a proper scientific thing, and weight it; so we weighted it with the distance and the presumed amount of traffic.

By Hon. Mr. Manion:

Q. What principle is there, in view of the past experience of over-building railroads in our country, which your line upholds in regard to earnings? Do you say you must have enough to pay operating expenses or enough to pay fixed charges? Is there any more or less fixed principle? Naturally, it could not be an exact one.—
A. We try to treat each case, but there are many things arising in building a new branch line into a new section where there is good land, and we build largely on faith with the hope that they will be filled up in sufficient time so that we will get the traffic, and with the further hope that the Railway Board will give us rates which will enable us to live financially.

Q. I notice on page 25 you say "There seems little hope of the line ever being self-supporting at rates even fifty per cent higher than the present ton mile freight rate on grain to Fort William for similar distance." I presume there must have been a pretty thorough investigation of the possibilities of

that section to make a broad statement of that sort?—A. We selected a certain area which we show on the map. For our maximum tonnage we railroaded it; we did not lay down the traffic locations of the branches because we did not want to have anybody draw the conclusion that there was going to be a railroad there. We were careful to say in our report that it was only a certain number of miles we assumed in a zone sufficient to be able to lift that traffic, and having determined the area from the government's land surveyor's map, we selected all the land which was susceptible to agriculture, and from that we assumed certain tonnage would be produced. We based it largely on wheat production, because with every agricultural land wheat production usually spells the biggest tonnage, and if you turn it into some other kind of tonnage, it is smaller than wheat, and if your assumption is fair and reasonable you have as big a tonnage from agriculture as on any other traffic.

Q. And taking that into account you came to the conclusion that within no reasonable time would this line be a success?—A. Yes, and we attempted to give figures to prove it. The idea is that we set it up—we were writing this report for the presidents of the two big systems of Canada, and we had to produce substantiating figures; they will not take bald statements from engineers; they want to be shown, and we attempted to show them.

By Mr. Fraser:

Q. You would not limit the area that is capable of development in the Peace River country?—A. We had to stop somewhere, because we had to stop our railway some place, and there is no good taking a further area with this mileage of railway; we would have to build more railways, and we took what we considered a fair area and railroaded it on paper.

Q. You took a limited area of the country?—A. Most decidedly.

Q. On page 15 of this report, in connection with the statements you have just made about traffic being taken into consideration and studying the economic viewpoint for the western outlets, you say: "Studying the summary of the economics for the western outlets, the general advantage of any route via Peace River Pass, in addition to the low summit to be crossed, and the favourable grades, is the possibility of some large mineral development in this section, but as there is nothing in sight at the present time to justify the expenditure of large sums of capital or to warrant the assumption that such development will ever take place, this gamble could not be recommended." Now I want to ask if there is any gambling in connection with the mining industry in any particular section of the country?—A. That refers to the gambling of the railroad, not the gambling of the mines.

Q. I take it, and I think the general view of the public will be that the gambling refers to the mines and not to the railways.—A. Then we did not put it plainly. We intended to say that we did not think the railways should gamble on there being the mineral resources sufficient for quick distribution.

Q. Then you go on and say: "A considerable mileage of railways in British Columbia now starving for traffic was constructed on the theory of traffic from minerals, which either never were developed or were only producers for a short time." Was there any railway in British Columbia where the mining traffic has not developed sufficient substantial revenue for the railways?—A. Yes.

Q. Would that not be a possibility?—A. And there are other examples where it has been exhausted. I can quote you the Kettle Valley railway, I can quote you the Nicola railroad, and I can quote you a good portion of the Crows Nest railway.

Q. The Nicola railway is operating to-day with substantial revenue from its coal areas.—A. Yes, but not sufficiently substantial to take care of the operating costs, much less the fixed charges.

Q. What about the lower end of the province? Was there not substantial revenue from the mining interests there?—A. No, there was not. I wish you would tell me where they are.

Q. Not around the Trail smelter?—A. Yes, the haul from the Sullivan mine to the Trail smelter, yes, because they happened to have it there after they found they were able to develop a system of drawing the ore instead of moving the Trail smelter back to the mine where it properly belonged. If they had not had it located at Trail, all the lines feeding into Trail were from mines which were practically exhausted.

Q. There are substantial revenues over the Kettle Valley to the coast?—A. I would not call them very substantial.

Q. What proportion of the rail revenue is accountable to the mining industry?—A. I cannot tell you that.

Q. It is in the statement of the Canadian National Railways.—A. If you are going in to look at the tonnage, you will see the American coal tonnage comes in there. That is from the mines, yes. If you are going to look at the tonnage statement of the Canadian National Railway all over the system you will find there is an increased tonnage of American coal. That has nothing to do with local production on the railway.

Q. But there are coal areas in the Peace River country?—A. Yes, there are.

By Mr. Millar:

Q. I would like to ask if, in planning a branch line railway program, the length of time a district has been settled without railway facilities becomes a factor?—A. Oh, undoubtedly a factor yes.

Q. It is a factor?—A. A factor. There are a good many factors of course.

The CHAIRMAN: Are there any further questions by members of the committee?

Witness retired.

J. M. R. FAIRBAIRN called.

By the Chairman:

Q. You are the chief engineer of the C.P.R.?—A. Yes.

The CHAIRMAN: Do any members of the committee wish to ask Mr. Fairbairn any questions? (No response.)

Thank you very much Mr. Fairbairn.

Witness retired.

E. M. M. HILL called.

By the Chairman:

Q. You are the exploration and locating engineer of the Canadian National Railways?—A. Yes.

By Mr. Kennedy:

Q. Who gave you your instructions regarding this report?—A. I report to Mr. Czowski.

Q. Will you tell us what your knowledge is of the Peace River country and of the routes? My question refers to whether or not you were in the Peace River country, and what portion, if any, of that you went over—all of it or any of it.—A. From time to time I have been looking over the railway situation for the

[Mr. C. S. Czowski.]

Canadian National or the Canadian Northern, and altogether I have been in there eleven months. That is in connection with routes, as well as being in the Peace River country itself.

Q. Well, have you been over the Obed route?—A. Not altogether; not exactly what is described as the Obed route now. I have been over a number of other routes which were first suggested and eliminated in favour of the Obed route.

Q. Who did the work in these routes?—A. We had regular surveying parties run over them. On the Obed route we have a complete survey from one end to the other.

Q. A complete survey?—A. A complete tri-line survey.

Q. Not a reconnaissance?—A. Not a reconnaissance, but an instrumental survey.

Q. In that case, Mr. Hill, you are in a position to speak definitely when you say that the new construction will be 204 miles from Aggie to Sturgeon Lake and down to Obed?—A. Within a reasonable percentage.

Q. How much allowance is there for variation—either less or more?—A. We would not want any more than—it would be within 10 per cent, and probably within five per cent.

Q. And would you say the same thing for the capital investment?—A. Yes.

Q. Now, when we come to the question of gradients against outbound traffic, we have up here .51 per cent; would you show the committee where that gradient is on the Obed route, how long it is, and whether it is against out-going or incoming traffic? The map is there behind you.—A. Well, the principal gradients for outgoing traffic—the heaviest gradient we have is at the Athabasca river; we come around here (indicating) and follow the Athabasca river. Obed is also in the valley of the Athabasca river, but considerably above the water level, and it is to get from the crossing of the Athabasca river to that elevation where we have the greatest trouble.

Q. How far is that?—A. I cannot tell you how far it is.

Q. Approximately?—A. Not even approximately—not on this map.

By Hon. Mr. Dunning:

Q. You can get the information?—A. We have that information, yes; the exact information is available.

By Mr. Kennedy:

Q. Over the rest of the line from Aggie through to Obed, what would be the stiffest grade against out-going traffic?—A. Five-tenths of one per cent; that is our maximum grade.

Q. But there is only that part of it, which looks like about 30 miles on the map,—maybe more or less than that— —A. No, there are more stretches.

Q. I want to get— —A. It is that we would call a five-tenths line; it does not matter whether it is all five-tenths or sufficient of it to rate our trains on a five-tenths basis.

Q. How much of the rest of the route to Vancouver or Prince Rupert would have gradients of five-tenths per cent?—A. You mean on this route (indicating)?

Q. No, taking from Aggie down to Obed, and then through to Prince Rupert and Vancouver—the existing line.—A. There are no gradients I know of that are over five-tenths.

Q. On traffic moving west?—A. On traffic moving west.

Q. But is there any stiffer grade than that moving eastward, say from Prince Rupert or Vancouver into the Peace river country—say into Aggie?—A. There are no gradients inbound which would interfere with the five-tenths outbound; they would be in that; they would not cause a rating on the line.

Q. I thought there was a gradient of seven-tenths somewhere between Edson, Jasper, and Blue river against traffic coming east?—A. There is a heavier gradient; that is eastbound.

Q. Are there any heavy gradients into the Peace river country within the five-tenths on the Canadian National main line?—A. Our surveys show us it is possible to get a line with a five-tenths gradient.

Q. Now, in connection with the average distance traffic is hauled to Vancouver; from reading the report I understand the method adopted is this; you take the traffic zones, and take a point in each of these zones, and that is the centre, and then average those to Prince Rupert and Vancouver. Is that the way it is done?—A. The average comes in in choosing the zone centre; it is the direct mileage from there to Vancouver.

Q. On what basis did you work out this 905 miles over the Obed route? I think that is important, and rather confusing. I had some difficulty in understanding the way in which it was worked out.—A. That is worked out in tables one and two. You mean the average weighted distance? In the last column there are the gross ton miles, and you divide that by the gross tons and you get the weighted average distance traffic is hauled. There is another way to work it out,—a proper way—and we have done that, and that is to multiply these across individually.

Q. That is somewhat technical. What I am trying to get at is what point in the Peace river country you took as the centre of the traffic—the geographical point?—A. In connection with a report we should always have a map. The map should have been attached to it, and it shows on the map the points where the centre of the zones is taken.

Q. That is the unfortunate thing about the report; you see it is not a completed report. The report which was handed in to the Department of Railways and Canals did not have the map. There is a report in existence and the reason I have to ask this is because I have not seen a copy of that report.—A. We cannot say anything about it. The map will show it quite distinctly.

Q. I think this is important, because when you come to a comparison between the routes, we have to have an idea at least as to what is taken as the centre of the country.—A. That is quite distinct on the map.

Q. What are these points? Point them out to us.—A. They are marked on the map with the black dots. For instance, in zone one, it is McLennan; zone two is Webster; zone three is taken out in the Cut Bank river west of Pouce-Coupe, and on the north side there is no name of any place, but we took this (indicating) roughly as the centre.

Q. What is the point on the north side of the river?—A. It has no name; it is just a chosen point.

Hon. Mr. DUNNING: There is no point; it is the centre of the zone.

By Mr. Kennedy:

Q. Is it near Hudson's Hope or St. John?—A. No, between Hudson's Hope and the boundary.

By Mr. Fraser:

Q. North of St. John?—A. Yes, north of St. John. In zone six it is down here at Berwyn; we took it at Berwyn exactly. For zone seven it is at a point 140 miles north of Berwyn.

By Hon. Mr. Stevens:

Q. Having chosen this point, in figuring this mileage out, what did you do?—A. We have assumed a tonnage for each zone, and we assumed it all originated [Mr. E. M. M. Hill.]

at that point, and we have the mileage from that point to Prince Rupert or Vancouver, or wherever we happened to be figuring, and we multiplied them out, and we assumed to railroad the district to cover that.

Q. That is a maximum tonnage?—A. That is the maximum or minimum—both minimum and maximum.

By Mr. Kennedy:

Q. Would you agree, Mr. Hill, that the centre of all these zones is practically a line drawn from Berwyn to Grand Prairie?—A. I don't understand that question.

Q. The centre of the Peace River country, north and south of the Peace, as it is served by railways today, and speaking of a reasonable development, is from Berwyn through to Grand Prairie.—A. You want the half-way point? I do not understand your question yet.

Q. Well, in estimating the mileage between the Obed route and the Monkman route, if you are going to take the centre of the zones at the west end for estimating one route, and the centre of the zones east in estimating the mileage of the other route, it seems to me you will not get a correct comparison, but if you can strike something in the centre of the whole country—it seems to me that Grand Prairie and Berwyn are the points.—A. We could bring it down to one centre, I believe, but taking any one of these points here (indicating); take that distance there (indicating), or even the distance there (indicating) and from there (indicating) to Prince Rupert, you follow that green line around—

By the Chairman:

Q. Will you mention the points, Mr. Hill? The reporter cannot get it down accurately unless you mention the points. When you say "here" it does not mean much in the printed report.

Hon. Mr. DUNNING: Unfortunately, I suppose some of the points are not named.

The WITNESS: I could say the centre of zone three, for instance.

By Mr. Kennedy:

Q. Can you tell us the distance from Grande Prairie to Vancouver and Prince Rupert over the Obed route?—A. They are weighted distances in there of the various gradings.

Q. Yes, you have that later, but it is a little technical and I was just wondering if you could not simplify it a little. That is given as 905 miles and we want to know just what that means and how it is arrived at. We are told that it is given in this table here, but it is somewhat difficult to understand the table unless you are something of an engineer, taking the ton miles and so on. You cannot give us that, Mr. Hill?—A. The actual distance?

Q. The actual distance; give us the actual distance, and then show us how you have computed it?—A. You want to know how we arrive at the 905 miles, the weighted average distance traffic is hauled?

Q. I want to get the actual mileage and then I want you to explain to us how you vary the actual mileage against the grade? For instance, it may be 900 miles; did you arrive at another figure because of certain variations in the grades and tonnage you can haul, and so on?—A. Yes, there is a table in the report showing the relative values.

Q. If you can give us an explanation. What is the actual mileage and how does it vary by that table; that will satisfy me in the meantime?—A. I think the table is on page 14. 0.4 per cent at 100 per cent. That is, if we had 100 miles of 0.4 line we would call it 100 miles.

Q. 100 miles of 0.4 per cent is 100 miles?—A. Yes, and 100 miles of 0.5 grade is 114 miles.

Q. We have a 5 per cent grade coming out from Aggie to Obed?—A. Yes.

Hon. Mr. DUNNING: Not five per cent.

Mr. KENNEDY: 0.5 per cent.

By Mr. Kennedy:

Q. Does the 114 apply to these 204 miles as against 100, or does it apply to all the mileage between Aggie and Vancouver or Prince Rupert?—A. It applies only to the 204 miles. From there on it is straight mileage because it is on an 0.4 basis.

Q. What are the points from which you estimated the mileage to arrive at this 905 miles in the Peace River country? You say that the average distance traffic is hauled is 905 miles; how did you build that up? You must have taken the actual mileage to start with?—A. Yes.

Q. I want to know the actual mileage you took, that is the point?—A. Well, we will take, for example, zone 1. We will work it out to see how many miles. We know how many miles are 0.5 and how many miles are 0.4. We measure up all the mileage from McLennan, I think—I would not be sure about this—down to there (indicating) it is 0.5.

Q. That whole thing is included as 0.5, is it, from McLennan to Obed?—A. I would not be sure of this piece here (indicating). Yes, that is all estimated at 0.5; for this purpose that actual mileage from the centre of Zone 1 to Obed, we take 114 per cent of it, and the rest of it, being 0.4 grading, we just take the actual mileage. That is the weighted distance that traffic is hauled from there.

Q. And in arriving at 905 miles, did you take the weighted distance from all these various points marked as being the centres of the various zones?—A. In a similar manner, we estimated it for every zone. We got the actual mileage and the percentage that was on the different gradings and weighted it and multiplied it by the tonnage, and that is our mileage.

Q. You call that weighted mileage?—A. Yes.

Q. In connection with the Obed route, the estimate is \$13,336,000 for initial expenditure, that is to Vancouver; \$13,356,000 to Prince Rupert. You also state in your report that in order to build this line for a maximum tonnage you would require a line from Grande Prairie to Sturgeon Lake. Will you be good enough to point that out on the map, where that would go?—A. (Mr. Hill indicates on map.)

Q. What would be the cost of that line; it is 60 miles long, according to the report, and you have to cross the Smoky River?—A. I do not know just what we put on that per mile, but it was higher than the others.

Q. Can you get that information for us?—A. Yes. \$52,000 per mile. I would like to be able to confirm that figure.

Q. That is because of the bridge across the Smoky River?—A. Yes.

Q. That would be a total of \$52,000 by 60 miles?—A. I would like to have a chance to verify that; I believe it is higher on account of the bridge.

Q. \$3,100,000.

Hon. Mr. DUNNING: He says he would like to have a chance to verify that figure.

By Mr. Kennedy:

Q. In that case the Obed route with a branch from Aggie to Obed and with a branch to Grande Prairie is approximately the same cost as the Monkman route? The estimated expenditure in the Monkman route is \$16,000,000?—A. Yes. Only, a trunk line to Aggie, it does not give that branch line.

[Mr. E. M. M. Hill.]

Q. No, it does not; but it will mean a back haul for all traffic out of Grande Prairie and south of Spirit River in order to take out that traffic by the Aggie route?—A. Well, it is a back haul country.

Q. Can you tell me what the grades would be crossing Smoky River?—A. Lines have been run through with gradients as low as 1.2 per cent. I am doubtful if it is possible to get anything lower than that and probably in actual practice they would be higher.

Q. Will you point out to the Committee the proposed Monkman route?—A. (Mr. Hill indicates on map). The Monkman route is in green, it runs from Wembley almost in a southwesterly direction to Aleza Lake on the present Canadian National Railway and three miles east of Prince George.

Q. Before we go any farther there; have you been over the Monkman route yourself?—A. I have been over a portion of it, through the Monkman Pass.

Q. You are possibly in the best position of any of the engineers to speak?—A. I think I am the only one that has been there.

Q. Were any of the other engineers who signed the report over it with you?—A. No.

Q. They took your word for it?—A. They took my word.

Q. The new construction by way of the C.N.R. to Prince Rupert is 188 miles, as given in this report. I think the proper distance is 168 miles, if I understand the figures correctly. We have the heading, "To Vancouver and Prince Rupert via the Monkman Pass," and then a paragraph which explains the route, and says:

A line via this route would leave the Edmonton-Dunvegan and British Columbia Railway at Wembley and run in a southwesterly direction to the valley of the Red Willow river to Stony lake (65 miles), and thence southwesterly in the valley of the Contrary river to the Murray river (30 miles), and thence south in the valley of the Murray and Cariboo rivers to the Monkman Pass (30 miles), and thence southwesterly in the valleys of the Moose, Herrick and McGregor rivers to Aleza Lake on the Canadian National Railways (63 miles).

The new mileage would be 168 instead of 188, so that the report appears to be incorrect, either in the explanation given or the mileage given. I would like to know if 188 is correct, or if the total of 168 is correct.

Hon. Mr. DUNNING: Have you added up the figures correctly?

Mr. HILL: 188 is correct.

Hon. Mr. DUNNING: I make it 188; 65, 30, 30, and 63.

Mr. KENNEDY: Oh, yes; I thought that was a repetition of the previous figure.

By Mr. Kennedy:

Q. You might explain to the Committee, and point out on the map, the new mileage to be constructed to get to Prince Rupert and the new mileage to get to Vancouver. There is a cut-off that possibly it would be well to have explained?—A. Going to Prince Rupert it is a direct connection with the present Canadian National Railway. This extra ten miles comes in at Tete Jaun; that would be a connection between the old, original Grank Trunk Pacific and the old, original Canadian National at the foot of the hill. Instead of hauling the traffic up the hill and then down again it is possible to make that connection down there.

Q. The two railways that from this distance look like one are ten miles apart there?—A. Yes.

Q. And if that ten miles was not constructed it would be necessary to run back to Red Pass Junction?—A. It would be necessary to run back to Red Pass Junction on account of the grading.

Q. Is this a final survey or a reconnaissance or a trial survey?—A. This is a reconnaissance.

Q. What is the difference between reconnaissance, trial and a complete survey; will you kindly explain that? What do you do in the case of a trial survey, for instance?—A. Well, a trial line is generally an instrumental survey; it is an accurate survey.

Q. A trial survey is accurate?—A. Yes.

Q. What is a reconnaissance survey?—A. Well, they just trust the man that goes over it.

Q. He goes out with a pack on his back, is that it?—A. Well, they have different forms of transportation.

Q. Is a reconnaissance survey a question of making a trip there to see if it is at all likely a railway can be built?—A. Yes.

Q. A trial survey is a survey that actually gives you the level?—A. Actually gives you the levels and the relative positions.

Q. What is this Monkman Pass survey? Is it a trial survey?—A. A reconnaissance.

Q. When we come to the question of costs and grades how reliable are these figures in connection with the Monkman Pass as given in this report?—A. Just an engineer's guess, that is all.

Q. When you say that you studied the various economic factors in connection with this report, and the various routes, it is a pretty sweeping statement to make on an engineer's guess in connection with one of the main routes; don't you think so?—A. There has not been any definite information on many routes; we just have to take what we have.

Q. Will you let us know?—A. It is customary for the railway to take these guesses if they know who makes them.

Q. Well, who made this guess?—A. I did.

By Hon. Mr. Dunning:

Q. What gradient did you assume, Mr. Hill?—A. I assumed for west-bound traffic, on a short distance, 0.75 grades.

Q. That is lower than any other pass?—A. No, through the Yellow Head Pass we have 0.4.

Q. But you know from the elevation in this case it could not be 0.4, is that the idea?—A. Well, it is possible from a reconnaissance to say. I am of the opinion that if we built it on the scale of a real transcontinental railway we might get through there on a 0.4 grade, but that would be very much more costly. It is quite practicable, in my estimation, to build a line through there on 0.75 grade.

By Mr. Kennedy:

Q. How much of this 0.75 grade will there be on the Monkman route between Wembley and Aleza Lake on the Canadian National?—A. Well, sufficient to call one division a 0.75 grade; that is, a one engine district.

Q. That would mean the whole distance from Wembley to— —A. No, probably a hundred miles; there would not be a hundred miles of 0.75 grade but it would affect that district.

Q. This is where the P.G.E. 0.1 per cent grade comes into Vancouver; in connection with this route the P.G.E. is used. You know the average distance traffic is hauled to Prince Rupert. I wonder if you would mind filing with the Committee the actual mileages taken from the various zones in your map, and then show how you work out the weighted mileages?—A. It is in the Tables.

Q. It is there, but I wonder if you would give us the actual mileages from these various points and then work them out on the basis of the 100 or whatever it is?—A. It is all done in the Tables now.

Q. Which table?—A. The route distance from the centre of the zone is given for all zones, the actual distance from the centre of any zone to the various ports by the various routes.

Q. And these points are, if I understand it correctly, McLennan—which zone is that?—A. You cannot describe them by the name of the town in every zone. In Zone 1, it is McLennan; in Zone 2, it is Webster; in Zone 3, it is on the Cut Back River west of Pouce-Coupé; in Zone 4, it is Findlay Forks; in Zone 5, it is north of Fort St. John about half way between the river and the boundary; in Zone 6, it is Burwood; and Zone 7, it is 40 miles north of that point (indicating) down in the valley of the river.

By Hon. Mr. Dunning:

Q. Mr. Hill, in taking this zone system, is it correct to say that you had in mind what would be the actual operating conditions and that you were trying to arrive at what the result would be in actual operation; is that the object of zoning?—A. That was the object. There are some places that are west of these zones and we tried to average it so that it would work out; the points farther west would have further to haul, but the points farther east than that zone would have a less distance; it would be an average.

By Mr. Fraser:

Q. Do you have to build a new bridge at Aleza Lake or do you cross on the present bridge of the Canadian National?—A. We would have to build a new bridge.

Witness retired.

The Committee adjourned until Friday, March 18th, 1927 at 11 o'clock.

SESSION 1926-27
HOUSE OF COMMONS

SELECT STANDING COMMITTEE ON

RAILWAYS, CANALS AND TELEGRAPH LINES

Various Proposed Railway Routes for a Western
Outlet to the Pacific from the
Peace River District

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 2—FRIDAY, MARCH 18, 1927

WITNESSES:

Mr. C. S. Czowski, Chief Engineer, Construction Department, Canadian National Railways.

Mr. E. M. M. Hill, Exploration and Locating Engineer, Can. Nat. Rlys.
Mr. J. G. Sullivan, Consulting Engineer, Canadian Pacific Railway Co.
Mr. W. A. James, Assistant Chief Engineer, Canadian Pacific Rly. Co.

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1927

ORDER OF REFERENCE

THURSDAY, March 17, 1927.

Ordered,—That the name of Mr. Young (Toronto Northeast) be substituted for that of Sir Henry Drayton on the said Committee.

Attest.

ARTHUR BEAUCHESNE,

Clerk of the House.

MINUTES OF PROCEEDINGS

FRIDAY, 18th March, 1927.

The Committee met at 11.00 a.m., Mr. Young (Saskatoon), the Acting Chairman, presiding.

Present: Messrs. Anderson (Toronto-High Park), Auger, Bettez, Bothwell, Bradette, Campbell, Casgrain, Donnelly, Dunning, Fafard, Fansher (Lambton East), Fansher (Last Mountain), Fraser, Gardiner, Gershaw, Girouard, Glen, Goodison, Heaps, Howden, Jelliff, Kay, Kellner, Kennedy, Laflamme, Letellier, Lucas, Luchkovieh, McIntosh, McKenzie, McLean (Melfort), McPhee, McQuarrie, Marcil, Milne, Spence (Maple Creek), Spencer, Totzke, Vallance, Young (Saskatoon), Young (Weyburn)—41.

Bill No. 67 (Letter O2 of the Senate), An Act respecting The Quebec Montreal and Southern Railway Company.

Preamble read and adopted.

Section 1 carried.

Ordered, To report the bill without amendment.

PEACE RIVER DISTRICT PROPOSED RAILWAY OUTLETS TO THE PACIFIC

Hon. Mr. Dunning intimated that Premier Oliver of British Columbia, and Dr. Sutherland would like to be heard on Friday, 25th March. On motion of Mr. Fraser,—

Resolved,—That Premier Oliver of British Columbia, and Dr. Sutherland be heard on Friday, 25th March.

Hon. Mr. Dunning filed maps, supplementary to the engineers' report, for distribution to the members of the Committee.

The Committee resumed consideration of the engineers' report. Messrs. Czowski and Hill were further examined, and Mr. Sullivan made a statement. Mr. W. A. James, Assistant Chief Engineer of Canadian Pacific Railway, was called and examined. Witnesses retired.

On motion of Mr. Kennedy,—

Ordered,—That Mr. F. H. Kitto, Natural Resources Branch, Department of Interior, Ottawa, be requested to attend on Friday, 25th March, at 11.00 a.m.

CANADIAN NATIONAL RAILWAY BRANCH LINES BILLS

On motion of Hon. Mr. Dunning,—

Resolved,—That the Committee meet on Monday, 21st March, to consider Canadian National Railway Branch Lines Bills.

The Committee adjourned at 1.00 p.m. until Monday, 21st March, at 11.00 a.m.

MINUTES OF EVIDENCE

COMMITTEE ROOM 231,

HOUSE OF COMMONS,

FRIDAY, March 18th, 1927.

The Select Standing Committee on Railways, Canals and Telegraph Lines met at 11 a.m., the Acting Chairman, Mr. Young (Saskatoon), presiding.

The Committee proceeded to the consideration of the report on various proposed railway routes for a western outlet to the Pacific from the Peace River District.

The CHAIRMAN: Is it agreed that we meet one week from to-day in order that the Premier of British Columbia may be here? It is understood that a meeting may be called in the meantime, but we want to have that day reserved for the Premier.

Hon. MEMBERS: Agreed.

E. M. M. HILL recalled.

By Mr. Kennedy:

Q. I asked you on Wednesday a question regarding the mileage over the Monkman route. I want to put myself right in the Committee; I have a type-written copy of the report here and one of the 30 miles is left out. You were talking about the various traffic zones and you gave us the central point in each zone. In connection with Table No. 1, you have "initial tonnage." If I understand it correctly, the mileage is assumed on the basis of the central points in zones 1, 2 and 6, but you do not appear to have taken the mileage from the other zones. Is that correct?—A. That is correct.

Q. Then the 905 miles to Vancouver by way Obed and the C.N.R., 905 miles, given in the second last column, just takes into consideration the actual mileage or the weighted mileage?—A. That is the weighted average mileage.

Hon. Mr. DUNNING: Perhaps Mr. Czowski could give you that information better than you can.

Witness retired.

C. S. CZOWSKI recalled.

By Mr. Kennedy:

Q. I think you heard my question regarding the 905 miles, Mr. Czowski, as being the weighted average distance the traffic is hauled, and that applies to the three traffic zones marked on the map with McLennan, Webster and Berwyn as the centres?—A. That is correct.

Q. Does that mean that in the view of the engineers signing this report the Obed route would serve that territory only?—A. For the initial traffic. The initial traffic does not contemplate the construction of any internal branch lines; it is only when we come to the maximum tonnage that the branch lines are

[Mr. C. S. Czowski.]

considered. That map shows the branch line mileage that was assumed and Table No. 2 gives the traffic from the seven zones.

Q. Well, then, under that scheme you intend to use parts of the Edmonton-Dunvegan and British Columbia railway and the Canadian Central Railway as branch lines?—A. Yes, sir, we intend to use and did use in the study all the existing mileage within the areas considered.

Q. I notice the cost of construction, in the third column, for new trunk line, 204 miles, is \$9,984,000, and terminals, \$1,000,000, making a total of \$10,984,000. Then you have a figure of \$2,352,000 for equipment, locomotives and freight cars; that is correct, is it not?—A. Yes.

Q. And the two items taken together make \$13,336,000. Now, taking the tonnage from the initial tonnage assumed; that traffic to-day is being hauled almost 1,200 miles to the coast, is it not?—A. Roughly.

Q. Well, by what process of reasoning have you eliminated 200 miles of a haul and why are you going to require additional equipment?—A. Mr. Kennedy, that was put on to make an economic comparison. You will note at the foot of that same Table we have given a computation based on hauling it by Edmonton and in that we have added equipment so as to be perfectly fair to all routes. In that Table we have not favoured any route at all. The cost of equipment was based on the mileage, and we used the same mileage for cars, and the same mileage for locomotives in every one of the routes, based on the gross ton miles that would move. There is no favoritism shown to any route there so far as capital is concerned.

Q. I am not arguing that there is favoritism shown to any route. But I was thinking that possibly the initial expenditure would not require to be \$13,000,000 but rather that only \$10,984,000 would be required?—A. Even if you never spend a dollar of capital money on equipment you would still have to lease the equipment and would have the interest on it. The interest per diem charge between railways works out, so far as it can be ascertained, exactly on the same principle, whether you own the equipment or whether you lease it. The only difference is if you own the equipment you will probably have to carry it when you are not busy; if you lease it you can get rid of it and you may be able to save money. But the per diem charge arranged between railways, and it is adjusted from time to time, is on a basis that makes no difference whether you own it or whether you lease it. An advantage in owning it is to have it when you need it, but in making an economic study you have got to take the equipment into account.

Q. But it does not necessarily mean an actual initial expenditure of \$13,336,000?—A. Instead of it being an interest charge it would be what they call "rented equipment". We should have to put in rental of equipment instead of the way we have done it by putting in capital for equipment. We would have arrived at the same annual expense.

Q. If you take into consideration the comparison as between the mileage from the Peace River country and the Pacific coast; if you take into consideration all the zones it would make some considerable difference would it not?—A. That is shown on No. 2. It increases all the mileage, Mr. Kennedy, because we go farther up when we build branch lines.

Q. It increases it by Obed?—A. It increases them all. I will show you what it does; for the minimum traffic on the Obed route it would be the 905 miles that you refer to. When we come to the maximum it takes 1,100 miles. Take another example; take the Monkman route by the Canadian National; for the initial traffic that route was 811 miles, the weighted average; when we come to the maximum it becomes 977. They were all increased because we went farther for the traffic in the maximum.

Witness retired.

[Mr. C. S. Czowski.]

E. M. M. HILL recalled.

By Mr. Kennedy:

Q. In your report you have eliminated consideration of the Pine Pass route altogether?—A. Yes; in favour of the Monkman Pass.

Q. That is entirely on account of the fact that the Monkman Pass is lower, the summit is lower, is it?—A. Not altogether; it is because it is shorter.

By Hon. Mr. Dunning:

Q. Is it shorter in addition to there being a lower elevation?—A. The Monkman Pass is not as low as the Pine Pass but the Pine Pass in the true sense of the word is not a pass through the Rocky Mountains. It is simply a portage between Peace River waters; it is just a local summit. When you go through the Pine Pass you are on the same water as you left. That is not the case with the Monkman Pass or the Yellow Head Pass; when you cross these passes you leave the Arctic waters and go into the Pacific waters. If you go through the Pine Pass on both sides you are on the Arctic waters; it is just a portage.

By Mr. Spence (Maple Creek):

Q. Would you mind pointing that Pass out on the map?—A. This is Pine Pass here (indicating). This is Monkman Pass, Wapiti, Peace and Yellow Head Passes. (Indicating.)

Q. They all cross the Rockies?—A. They all cross the Rockies except Pine Pass; Pine Pass is across the Rockies but not across the Continental Divide.

By Hon. Mr. Dunning:

Q. Your point is that Pine Pass is not a real pass between two water sheds?—A. It is not a continental pass; it is not between two waters, it is just between the same waters.

Q. That would be a longer route than the Monkman?—A. A longer route than the Monkman Pass.

Q. But a lower elevation?—A. It is a lower elevation.

Q. And do you not, at some point farther along Pine Pass, have to cross the Continental Divide?—A. We cross the Continental Divide at what they call Summit Lake but we are through the Rocky Mountains then.

By Mr. Lucas:

Q. What is the difference between the mileage via Pine Pass and Monkman Pass?—A. I could not give you that at present.

By Mr. Donnelly:

Q. In the building of any one of these lines will the freight and passenger traffic by the Edmonton-Dunvegan line decrease?—A. Absolutely.

Q. What effect would these lines have on that road?—A. They would have to divide the traffic; in what proportion we do not know.

By Mr. Spence (Maple Creek):

Q. Would it make a serious in-road on the traffic for the Edmonton-Dunvegan line?—A. It probably would in a certain sense; the traffic would go out that way as it would be more favourable to it than the present route.

By Mr. Glen:

Q. It is bound to affect the Dunvegan line?—A. Absolutely.

Q. It will take traffic away from it?—A. Yes.

By Hon. Mr. Dunning:

Q. Do you not take into account practically all the present territory on the Edmonton-Dunvegan when you lay out your zones?—A. All, except a very short mileage immediately north of Edmonton.

By Mr. Kennedy:

Q. What is that mileage, Mr. Hill?—A. Well, it is very hard to give it accurately.

Q. Just about a division, is it not; Edmonton to Smith?—A. Well, there is very little on the northern end of that division.

By Mr. Donnelly:

Q. How much good land is there in that?—A. We estimated there were 8,300,000 acres within that boundary.

Q. The best land is taken up at present?—A. Yes.

By Mr. Spence (Maple Creek):

Q. Those boundaries include the marginal land?—A. They are compiled from the Government maps, yes.

By Hon. Mr. Dunning:

Q. When you say "good land" do you mean first-class land, or do you include in that, say, 50 per cent arable?—A. Well, in that area given there is a land classification map out now and we went over it very carefully, and the land which was shown as suitable for settlement and could be easily cleared, we call it first-class land. What is marked on the map as being unsuitable for settlement we have excluded.

By Mr. Donnelly:

Q. Is there any good land along the route of the railway itself?—A. Not on any of the routes, nothing to speak of.

By Mr. Lucas:

Q. Have you any idea of how many settlers are in that district now?—A. I understand there are about 20,000.

Q. If there are about 8,000,000 acres of good land up there it will mean that there is a tremendous lot of room for more settlers, would it not?—A. Yes, but if you take the whole of Western Canada and compare it you will open up a very large field. You cannot bring settlers in there and put them in the Peace River country even though it is good land. If you are going to open up another plane of land the same would apply to the prairies in general. If people are willing to take up this second-class land in the Peace River country there are many millions of acres of similar land on the prairies that are not occupied and that settlers do not think is worth their while tackling.

By Mr. Kennedy:

Q. Where is that land?—A. All over the prairies.

By Mr. Spencer:

Q. Would you not consider land with timber on it worth while even if it is not agricultural land?—A. Worth considering?

Q. Yes.—A. If the timber is of commercial value, yes.

By Mr. Donnelly:

Q. What freight rate did you estimate in the Peace River district, what would it be per 100 pounds via any one of these routes from the Peace River?—A. We did not estimate any.

Q. What do you estimate it would be, about?—A. We did not estimate it would be anything; we just tried to show you what you would have to charge, the cost to break out even.

Q. What rate do you think you would have to charge?—A. Well, Mr. Czowski or Mr. Sullivan are better acquainted with that.

Witness retired.

C. S. Czowski recalled.

By Mr. Donnelly:

Q. What rate on grain, for example, going out of the Peace River would you have to charge on any one of these routes to Vancouver?—A. I worked up these figures anticipating such a question. I based the operating costs per net ton mile on the same figure as given by our statisticians to the Board of Railway Commissioners recently for the average cost of handling grain to Vancouver during the year 1925. That figure was .566 cents per ton mile. Then we have the operating costs based on that statement; that is per net ton mile. We have shown in the Table here the fixed charges involved, per net ton mile, over every route, and for the minimum and maximum traffic. Taking the maximum traffic, that is when the full tonnage we assumed is moving, over the Obed route it works out at .227 cents per ton mile. Adding that to this figure given before the Board of Railway Commissioners for handling grain to the coast, we come to a total cost of operating plus fixed charges for the Obed route based on maximum traffic of 0.793 cents per ton mile. This is based on the weighted average distance of 909 miles. We would have to charge 36.04 cents per 100 pounds to exactly break even on the estimates that I have given.

By Hon. Mr. Dunning:

Q. That is based on the maximum traffic?—A. Yes.

By Mr. Donnelly:

Q. What is the rate per ton mile at the present time over the Edmonton and Dunvegan?—A. It will depend considerably on the point. The typical points would be McLennan, Peace River, Spirit River, Berwyn; all of which charge the same rate of 26 cents per 100 pounds. The mileage varies, therefore the ton mile rate is different; .521, .507, .484, .464, .476, .474. Generally, you might say that it is 48 or 49 cents per ton mile.

By Mr. Kellner:

Q. That is the export rate?—A. Yes, for export.

Q. What is the domestic rate?—A. I cannot give you that.

Q. It would be possibly around 44 cents, would it not?—A. I cannot answer that question.

Q. Do you figure that out on an estimation of the grain that has been shipped out in past years, or do you compute the amount?—A. For the maximum traffic, no.

Q. You compute that?—A. We computed that entirely.

Q. What area did you cover from the railroad; that is, how far did you estimate the railroad would draw?—A. Well, we did not estimate it in that way. I think, as a matter of fact, we would have a fairly long haul over the

branch line mileage that we estimate would be built for the maximum traffic within that area. I tested it the other day by taking the area and made a calculation as to the number of acres of what I have termed "economic land," in the three prairie provinces within ten miles of any existing railroad to-day, in order to set that up against the economic area for the railroad mileage that we estimate in our maximum traffic. I wanted to see whether we were liberal or otherwise in estimating the branch lines. The computation was made from a map of the three prairie provinces, all the sub-divided land within ten miles of any existing railway. We omitted any unsub-divided land, such as Indian Reserves, Forest Reserves, or any large body of water. In comparing with our figures we decided to still further reduce it, and we took 75 per cent of that. That figure was divided by the existing mileage in the three prairie provinces and we got 5,524 acres of economic land per mile of railroad in those three provinces. In the Peace River country, on the maximum traffic with the mileage existing and what we assumed would be built, by the same calculation we have 6,640 acres per mile of railway estimated for the maximum traffic within the district. To be fair, we must remember that in the three prairie provinces there is probably more duplication of railway mileage than there would be in the proposition we have taken, so allowing for that, this larger acreage per mile of railway should be reduced, or rather, I should say, on the prairies we could have got along with a little less mileage so that we might have arrived at a larger figure than the 5,524 miles.

By Mr. Kellner:

Q. 5,524 and what?—A. 6,640 acres per mile for maximum traffic.

By Mr. Donnelly:

Q. Just to return to that freight rate question; if I understand you rightly, you say that at the present time they have a rate of 26 cents per 100 pounds—
A. From many points.

Q. The rate at the maximum haulage, taking into account the initial cost, would be somewhere around 36 cents?—A. On the Obed route.

Q. Where they have a 26 cent rate now they would have a 36 cent rate if that were built?—A. Yes. I made another test. In evidence before the Board of Railway Commissioners the representatives of the Canadian National gave a figure of what the average receipts were per ton per mile on all grain going to Vancouver. I do not understand very much about freight rates, but I understand that was the figure ordered by the Board of Railway Commissioners to equalize some other rates, probably the Crows Nest, so if this connection was given the probable rate would be that rate. Mr. Kennedy was suggesting to Mr. Sullivan that our report was a sort of rate-making proposition, and wanted to know if that was the ordinary way it was done. Of course, we do not make the rates; we only argue in favour of certain rates, but if you apply the rates that the Board of Railway Commissioners have given on the ton mile basis to the Obed route, you will get a rate of about 24½ cents instead of the existing rate from Edmonton of 26 cents. I am taking that rate as it is from the larger number of points.

By Mr. Kellner:

Q. While you have a 26 cent rate, you also have another? It does not all move for 26 cents?—A. I said it was export grain, that is grain that is going out of the country, and I understand that export grain is largely the reason for wanting such a thing. I am talking about the thing that would be the bulk of the traffic. Of course, there are many other rates; there would be higher rates for commodities which have a much smaller tonnage.

Q. Then your computation takes in about ten miles on each side of the track?—A. No; I was trying to say we have not gone in that way to test out how many acres per mile there are, but the map will show you what we did. You can see there the outside rim of that area is more than ten miles which we have assumed. We were very careful to say that the location of these branch lines was indefinite; we were trying to make a fair comparison between the various rates.

Q. Then you took the average production to find out how many tons of grain that land is capable of producing?—A. We thought in order to test it perhaps the readiest and fairest way was to assume a certain average production on all this land, and we actually took a figure which works out something like six and a half bushels for every acre we assumed was taken up, and then we added 15 per cent—

By Hon. Mr. Dunning:

Q. Six and a half bushels for the whole acreage in the area?—A. What we call the economic area.

By Mr. Kellner:

Q. I think the average in Alberta has been 18 and something a acre.—A. Of the seeded area, yes. I made another computation—

By Hon. Mr. Dunning:

Q. You mean pasture, waste lands, and everything included?—A. Yes; some of it is fallow, some hay land, fodder land, and everything else.

My attention having been drawn to this, let me say that from this same acreage I referred to before in the three prairie provinces—that is, the total acreage of all sub-divided land within ten miles, and 75 per cent only of that area—looking at the average yield of wheat between the periods 1919 to 1923, as reported in the Year Book, it worked out an average yield of wheat per acre on the sub-divided land within ten miles of the railway at 2.47 for the three prairie provinces. Saskatchewan was better than the average with 3.47, Manitoba 1.37, and Alberta 1.68.

Q. Bushels per acre?—A. Yes.

Q. Per aggregated acre? Not per seeded acre?—A. Of course, I concede in a seeded acreage it runs up. I think in Saskatchewan over a period of five years it went up to something like 15, and Alberta was within a decimal of being as good, but we could have said there will be one-third or 25 per cent under seed all the time, and applied the 15 bushels, and we would not have arrived at the same thing. Considering these figures now, I think we were extremely liberal. If it were any other commodity from agricultural pursuits, I do not know of any other which will make such a big tonnage to the railways as wheat for a given area.

By Mr. Kellner:

Q. You mentioned a rate a little while ago of .566 cents per ton mile?—A. That was the operating cost as given to the Railway Commission.

Q. What area is that on—the prairie provinces?—A. That was on all the grain which went to Vancouver from wherever it came. Of course, it would naturally come about 100 per cent from Alberta.

Q. Was the same rate given on eastbound traffic before the Railway Commission?—A. Yes, it was. As a matter of fact, I have it here from Edmonton to the lake head worked out at 6.64, and from Melville to the lake head at 4.49 mills. That is not the rate—that is the actual operating cost.

By Hon. Mr. Dunning:

Q. Per ton mile?—A. Per net ton mile.

By Mr. Bradette:

Q. In regard to the timber lands out there, what is the quality of the timber? Is it marketable?—A. A good deal of it is, yes.

Q. In northern Ontario most of the traffic comes from the pulp wood and timber?—A. Yes, but the problem there was this; we have a railway into that country; they are asking consideration for a railway to the west. We cannot conceive of that traffic going west to the coast, and we did not take it into consideration. You cannot take coals to Newcastle, and you cannot take timber to the very best timber areas on the North American continent.

Q. What kind of wood is it, is it spruce or balsam or what?—A. Largely spruce. But no matter what it is, it will never go to the Pacific coast because it can be handled more economically on the Pacific coast as it is handled in larger units.

By Mr. Fraser:

Q. You are well aware there is a project at the present time for a pulp mill in Prince George. Is it not conceivable that the products of a mill of that kind would go to the Pacific coast?—A. Yes, it is conceivable.

By Mr. McLean (Melfort):

Q. What is the quality of that timber?—A. There is a lot of high grade timber, and there would be a lot of pulpwood.

Q. What do you mean by that?—A. It is a good grade of wood; what I mean is that it is not fir and is not cedar; it is largely spruce and good spruce.

Q. Good sawing spruce?—A. Yes, very good.

Q. About how much of that eight and a half million would be spruce?—A. I do not think we made that computation; we were studying the amount of tonnage that would go over the western outlet, and we believed—and I think we still believe—that the amount of timber which would go west would come within the 15 per cent we put in, and I am not changing my opinion on that. I have not heard anything that would convince me to the contrary.

Q. That timber land is within reach of the railroad now?—A. Some of it. There is a great deal of timber moving on that railroad. As a matter of fact, if you will look at the statistics you will find a big tonnage. Another thing; I think Mr. Kennedy referred to the present tonnage as shown on the totals. We were considering that in studying the traffic on the Edmonton and Dunvegan road, but the only figure we could get from the railway statistics was the one I have given, and when we saw this lumber we presumed it all moved east, but we took out the average haul of the Edmonton and Dunvegan, and we found it was only 139 miles.

Q. All local hauls?—A. No; this indicated there must be a lot of local stuff shifting back and forth; otherwise with the big haulage their average haul must have been more than 139 miles. We did not have the figures to know what it was exactly, and, as a matter of fact, we could not get all the figures at that time. The C.P.R. were operating it and we did not know how to get the figures, but in order to fix these quantities of traffic we studied the Edmonton and Dunvegan and tried to find what went in and what went out, whether it was a local movement, or whether it all went over the Edmonton and Dunvegan after originating at some point on the line, and we were surprised at the short length of the haul, indicating there must be some shuttling going on; that it did not originate on the Edmonton and Dunvegan and shoot right out to Edmonton, but there must be a stop there. It might be explained by local distribution, that

is, that logs would come in to the sawmill, and then be counted again as lumber going out. That might account for it. It is hard to say definitely from such meagre statistics as we had.

Q. A little while ago Mr. Hill said there were one and one-half million acres of good land; does that include all the Peace river country?—A. I do not know what they mean by the Peace river district, when spoken of in a broad sense, unless they mean the watershed. If they mean the drainage area into it, going up on to the summit of the mountains where the water is supplied, it might be one thing, but frankly, I do not know what the Peace river district is. I know what the Peace river block in British Columbia is, but the proper definition of the Peace river district I do not know.

Q. But eight and a half million is the total land served by the cut-offs?—A. No, eight and a half million is the area that is to be served, or rather, the economic land within the area that we have assumed.

Q. That would be served by the cut-off?—A. You see, we had to do one of two things—at least, we had to do both; we had to find out how big an area we were going to take into account, and we had to definitely find out because we had to railroad it on paper. We could not vaguely say there are so many acres, and we will put in so many miles of railway; we had to say we will take a certain area and build a certain amount of railroad, and that is the area we chose, whether rightly or wrongly. We could have chosen twice as much and put a relatively increased amount of branch lines in there.

By Hon. Mr. Dunning:

Q. But you did assume the building of new branch lines within the area to serve the assumed maximum area?—A. Yes, and that was the reason we had to define the area, because we had to define how much railway construction we would have to assume.

By Mr. Young (Weyburn):

Q. Have you taken that into account?—A. In the maximum traffic, yes, but in the minimum traffic, no. One map shows the mileage we used in connection with maximum traffic, the second shows the minimum traffic, and the third map is a general map of the traffic we assumed. We assumed for the initial traffic all we would build would be the outlet, and these branches for the outlet would be the existing railway.

By Mr. McLean (Melfort):

Q. The branches would serve the area outside of the eight and a half million acres?—A. For the maximum traffic, yes; then we assumed further branches to go into it.

Q. You cannot tell us what good land is outside of that eight and a half million acres?—A. We did not pretend to examine outside the area upon which we were basing our figures.

By Mr. Donnelly:

Q. Are you opening up any new territory at all in there—of arid lands?—A. On the branch line programme assumed for the maximum traffic?

Q. No, just the cut-off—the Obed line, or whatever it is.—A. No, we did not presume to build any new line except the cut-off itself.

Q. Are you opening up new territory?—A. Yes, but it depends on which route you are speaking of. We covered 34 routes each time, and there were certain subsidiaries to those, but if you build the Obed route, you assume—

Q. How much new arid land would you open up by building the cut-off?—
 A. I do not think it would be much; we certainly did not make any particular calculation of what it would be.

Q. It would be an acreage of about what?

By Mr. McLean (Melfort):

Q. Two or three million acres?—A. Oh no; a very small fraction of that.

By Mr. Fraser:

Q. You say in your report that the first 30 miles from Aggie to Sturgeon Lake is good land?—A. I was not sure of the figures. You can take a zone 30 miles long, and as wide as you think would be served by the railway.

By Mr. Young (Weyburn):

Q. What is the nature of the country?—A. The only prairie country in that whole district has been settled.

By Hon. Mr. Dunning:

Q. Mr. Czowski, you said that you did not take into account the position of the present Edmonton, Dunvegan and British Columbia railway; that you did not take into account the effect on the country in building this cut-off?—
 A. No, we did not, Mr. Dunning. Our position was quite peculiar; we were C.P.R. employees or Canadian National employees, and we had to step out of that position and we had to get on to the national ground and say we did not care who owned any existing railway at all, that we would make an economic study without assuming this railroad would be owned by anybody at all, and to see which is from a railroad economic standpoint the cheapest route.

Q. But as a matter of practical fact, when it came to the ownership of the E. D. and B. C., that would have to be taken into account?—A. I suppose so, to be fair to them. We have assumed that the majority of the heavy production of the land will go to the Pacific coast which now goes the other way; so there must be a subtraction from the E. D. and B. C., and I suppose they would be delighted to go in there.

Q. Separating you for a moment from this joint committee of engineers, and speaking to you as a Canadian National engineer, would not the cost of the cut-off have to be borne by the country?—A. Yes.

Q. So, from the Canadian National point of view, the E. D. and B. C. ownership becomes important?—A. Not if the Canadian National is not going to be made responsible for the financial results to the E. D. and B. C. Of course, if we were operating it but did not own it and were able to operate it on a certain basis, we would have to take into consideration the cost. It would be more costly—

Q. The E. D. and B. C. is now operated by the Alberta government?—
 A. Yes.

Q. And owned by them?—A. Yes.

Q. With a capital investment of around twenty million dollars?—A. I think it is a little short of that; I do not know exactly what it is.

By Mr. MacLean (Melfort):

Q. Suppose you owned that road, or the Dominion of Canada owned it, or the Canadian National, would you as an engineer— —A. You have put me in three positions,—

Q. No.—A. —you said "you" and "Canadian National" and "the Canadian government." I would take an entirely different view for myself than I would for the Canadian National or the Canadian government. My job as a Canadian National engineer is to preserve the economics of the Canadian

National, and I would not put it the same way if you were trying to put me in the position of the government. That is a different thing.

Q. As an engineer of the Canadian National, if you owned the E. D. and B. C. railroad, would you be willing to tell us what effect this cut-off would have?—A. It would be very serious, and as a matter of fact, we would have to give it a great deal of study. That is on the assumption that we were building the western cut-off.

Q. Supposing you were opposing the C.P.R. building the cut-off out of this territory, what would you tell us about the economic effect on your road?—A. I think I would take the stand that there was not sufficient traffic to justify the two, and it would be entirely unfair for this committee to grant a charter to the C.P.R. to build a line to split that traffic, and I have attempted to produce figures to show that there was not enough business for the two. If we had owned the road, and been given the rate at the time we made this report, of 39 cents per hundred, I would recommend to our executive that we reduce the rate to make it of no advantage to the C.P.R. to build that cut-off. That has practically come about. The rate to-day is 26 cents instead of 39, and as I attempted to show, if that line was built and if the Board of Railway Commissioners fixed the rate on the same basis as they fixed the other westbound rate on grain, there would only be a still further reduction of about one and a quarter or one and a half cents.

Q. You argue then there is no great economic advantage to be derived from building that cut-off?—A. Not with the present quantity of traffic. What I say is this; they have a railway in there, and all they are concerned with is the cost of taking the products to the Pacific coast, and it is the business of the combined railways how they handle it. If we can give a rate that satisfies them, and have to haul it on a longer route by 200 miles, that is our business and not theirs. They might answer that distance has a lot to do with it. I say if it has, why does grain move to Europe via the Panama Canal? It is rate, not distance, that has the greatest effect.

By Mr. Millar:

Q. On this rate with which you are operating on westbound grain, the Canadian National is not losing any money?—A. Yes, according to the costs given by our representative, and the average rates received will indicate that. Our people are contending that the rate to the Pacific coast is too low; they say it is unfair to ask us to operate on the Crowsnest rate which was contemplated as a rate for eastbound movement—to operate on the same rate westbound, because it is more expensive.

Q. You contend the railway is losing money on that rate?—A. Yes.

By Mr. Spencer:

Q. You told the committee that all the prairie land is taken up?—A. Substantially—within this area.

Q. Is it not also true that many thousands of people have left the prairies because they cannot make an economic success out there?—A. So I have been told. I do not know any more about it than that.

Q. And would that not be one very good reason why further railways should be given?—A. Oh well, that was before they got the 26 cent rate. As a matter of fact, was that not due to the drop in the price of wheat?

By Hon. Mr. Dunning:

Q. What was the former rate?—A. It worked out to about 39 cents.

Q. And in one reduction they came down to 26 cents?—A. I do not know whether it was one reduction or not. I only have the present rate; I do not know what happened when the C.P.R. were operating it.

Mr. SULLIVAN: I would like, from the C.P.R. point of view, to clear up one statement. I agree with everything Mr. Czowski has said but one, and that was that this map did not show the branch lines. Now, that is not quite true. It is equally true from the Canadian National standpoint, because what are practically main lines, if you include the Peace River country, become branch lines when you take into account the Obed route. We were careful not to show branch lines on this map. We did make a study but we tore the papers up so that no one could get hold of them and say they were promised a route and the engineers had put it down on a map. If you were going to the Peace River country this would become a main line (indicating) and that would have to be developed at once. For the initial traffic from this place (indicating), that might possibly be called a branch line.

The CHAIRMAN: Will you just mention the places?

Mr. SULLIVAN: I might put it this way: To get these loaded distances as to the traffic, the most accurate way, if we had that information, would be to take the grain or freight from each station and multiply that by the distance and then get the average. We were not able to do that for obvious reasons, and we certainly could not do it for the maximum traffic. We agreed between ourselves on taking a point in each district as shown here and estimating the traffic from each district, multiplying that by the distance from that point to the terminal and then dividing the total train miles by the ton and that would give you the average or weighted distance.

Hon. Mr. DUNNING: You said "train miles;" you mean "gross ton miles?"

Mr. SULLIVAN: Yes. To illustrate my point; from district one over the Obed route was 828 miles. Now, that was never changed for the maximum traffic, it was exactly the same. By way of Edmonton that was 1,025 miles, in both cases. By way of the Peace River, because that traffic would have gone through here (indicating), it was exactly the same. Then take district No. 2—you can see what I am trying to explain, instead of taking one point, as our friend Mr. Kennedy suggested, to make an accurate study it was really necessary to divide it into zones.

Mr. KENNEDY: What is the point in district No. 2, Mr. Sullivan?

Mr. SULLIVAN: District No. 2 is here at Webster (indicating). For the initial traffic it would be hauled through district No. 1, and down here (indicating). Therefore, the distance from district No. 2 was 945 miles for the minimum, but in the maximum case it was only 836 miles via Edmonton. We only took three districts, as far as the Obed route was concerned, as there was no necessity of further development with the exception of possibly a little bit in the case of district No. 6. That was practically the same in both cases, but with the exception of the P.G.E. the initial traffic had to come across the Peace River, come back here, and go out this way (indicating) which made it 1,105 miles. The initial traveled distance from district No. 6 out this way (indicating) was 965 miles.

You can readily see another reason for having these districts. In our initial traffic, if the Peace River was built, we would get some traffic at once from districts Nos. 3 and 4. We did not develop district No. 5. If this route was built (indicating) districts Nos. 3, 4 and 5 would not be developed for a long time.

Mr. KENNEDY: What do you mean by "this route"?

Mr. SULLIVAN: The Monkman Pass or the Obed route. I wanted to clear up that point in the minds of the members, the necessity of dividing into zones and how the actual weighted distance came in. If you will look at the Table on page 12 of the printed report you will see the total number of branch line miles that was calculated, but you will not find the location.

Hon. Mr. DUNNING: There was no location?

Mr. SULLIVAN: It was not put on paper. You can readily see that all of that (indicating) is straight branch line over this Obed route, while over the route going to Stewart or to Vancouver via the Peace River, it would become main line.

We mention in our report that in our opinion sometime in the past a large body of water broke through the backbone of the Rocky Mountains in the vicinity of Hudson Hope, and that the Peace River Pass near Fort George was really a Pacific water pass originally.

Mr. KENNEDY: Mr. Hill, were you over the Peace Pass route that is marked on the map?

Mr. HILL: No, I have not been through the Peace Pass.

Mr. KENNEDY: Who made that survey?

Mr. HILL: Mr. James.

W. A. JAMES, called.

By Mr. Kennedy:

Q. You are the C.P.R. engineer who signed the report?—A. Yes, sir.

Q. Were you over the route from Spirit River right west through to Hudson Hope and from Berwyn west of Hudson Hope on the north side of the Pass, and then through to Stewart?—A. On the north side of the Pass I left Fort George and went up to Sunmit Lake and down the Crooked River, the Pack River and the Parsnip, down the Peace River to Peace River Crossing and then northwest from Peace River Crossing, which is a station on the Peace River, and then back to Peace River and to Carcajou Point. I drove west from there and down paralleling the Peace River about 20 miles as far as Fort Vermilion, then I came up the Peace River from Fort Vermilion to Peace River Crossing again. I was over two months on that trip.

Q. You were actually over the route, were you?—A. Yes, sir.

Q. And the actual location of the railroad that is called Stewart to Prince Rupert and Vancouver via Peace Pass?—A. I went by the Peace Pass but I did not follow what you would call the actual route; I was on the river.

Q. We have no trial survey of this route, have we?—A. No, sir.

Q. Just a guess?—A. I do not call it a guess. I will tell you why; when we make a reconnaissance, whoever is making it is supposed to be a man with experience. He will go out with a compass and an aneroid barometer and he keeps his directions and his distances. In surveyed country he keeps track of the section line and checks up his distances as often as he can. If not, he tries to gauge the distances by whatever means of travel he has. If he is on foot he will travel, say, three or four miles an hour and can get his distance that way; if he is on horse back he will know about what a horse will travel an hour; if he is travelling by a team he will get his distance that way. Where we have maps we can always check up certain rivers and other points; we know how far those rivers are apart and we get our elevations and distances in that way. From experience we are able to judge what a line would cost and where it would have to go.

By Mr. Fraser:

Q. Is it not a fact that the C.P.R. had surveying parties through there before the present line of the C.P.R. was laid via the Kicking Horse Pass?—A. They had parties in there in the 70's.

Q. Before they started this they had pretty fair information regarding that Pass?—A. Yes.

By Mr. Kennedy:

Q. Well, you have not drawn this line on the map as a result of a personal visit?—A. Yes, sir, I have.

Q. Or a trip over the route?—A. That is approximately where I think the railway would go if we were building any.

Q. You have been over the route?—A. Yes, sir, I was through that country from the head waters.

Q. Did you travel from Hudson Hope to the Portland Canal at Stewart?—A. Oh, no, I never went to Stewart.

Q. What I am getting at; you have figured out the mileage but someone else saw it?—A. We had reports; there have been men through there and we had their reports.

Q. Would it be possible to file those reports with the Committee?—A. I do not know; I might possibly find them if I was in Winnipeg.

Q. Well, I am not satisfied to take a guess or anything else. We have the guess of the Canadian National engineer who was over the Obed route.—

A. I do not think anyone in this Committee, or in Canada, would consider the Stewart route in favour of any of the other routes.

Q. Well, we want to get information.—A. We know there is nothing in the country unless someone discovers a mine or something in there.

Q. Why is it in this report?—A. Because there were certain people seemed to think that that was a short line to the Coast.

Q. Would you regard the Table we have here, and the figures given regarding the mileage to be constructed, as reliable or just the wildest piece of guess-work?—A. It is not a wild guess, it is an approximation. We have to get the exact figures when we build a railroad, but there are only two factors that are uncertain. Rails, ties, buildings, and telegraph poles, they are the same no matter whether you are building to Stewart or to Vancouver, or any place. The only uncertain factors are the grading and bridging. We can make a pretty good estimate on the bridging because we can estimate closely the distance across a river either from maps or from Dominion land surveyors' reports, in different ways, and the price of rock does not vary very much; we know about how many thousand yards of rock there would be in a mile.

Q. Well, how do you figure the actual mileage, or even estimate it?—

A. Well, as I told you in the beginning, either from maps, if the country has been surveyed, or by the speed of travel.

Mr. KENNEDY: Well, I would be very much interested to see the reports and the maps and the method by which this is worked out.

By Mr. Jelliff:

Q. I would like to ask the witness whether railroads, as a matter of fact, build or refuse to build in consequence of reconnaissance surveys such as have been made in this case; do they not frequently build using that as their reason for building?—A. Sure. That is the first report that a company would get and they make appropriations from nothing more than their reconnaissance surveys. Of course, to build a railroad we have got to have exact measurements; we have to run a line out and figure locations and have everything as nearly accurate as possible.

By Mr. Spence (Maple Creek):

Q. You have special men for that work?—A. Yes, sir.

By Hon. Mr. Dunning:

Q. If you gave a reconnaissance report to your company and after they had appropriated the money the work cost twice as much as your reconnaissance indicated, what would happen to you?—A. I do not know what would happen to me; they would say I was a "bum engineer."

By Mr. Kennedy:

Q. Is this survey of the route via Peace Pass out to Stewart actually a reconnaissance?—A. There has been a reconnaissance survey made; there are reports in existence.

Q. Who made them?—A. I think the man's name was Smith; I do not know him, but I think his name was Smith.

Q. Did you have access to that report?—A. I did.

Q. Well, it is rather strange that we cannot have it produced?—A. I did not know you wanted it; I might have located it.

Q. Will you endeavour to produce it for us?—A. I hope I will not have to stay here until I produce it, but I will send it to you when I get back to Winnipeg, if I can find it.

Q. I do not see any reason why you could not send to Winnipeg and get it?—A. Well, it is in some of my personal papers, if I have it at all, and no one else would have access to it.

Q. In connection with this matter, Mr. James, do I understand your report to mean that this route is not a feasible route for the opening up of the Peace River country?—A. I would not say it was not feasible, but the others are so much better, any one of the others.

Q. You are surely not assuming that there will be more than one outlet to the west from the Peace River country?—A. I do not think so, and I think it will be to Vancouver, no matter what outlet it is.

Q. What is the object of putting in the Peace River route? Just to satisfy the curiosity of some people who are advocating that it might be a suitable route?—A. I do not think there is any good reason for it myself.

Q. You do not think it should be in this report at all?—A. I do not see any good purpose.

Q. In view of what you have told us, I would think so myself. In connection with the development of this route, you have given the estimated mileage and estimated cost, initial and ultimate, but there is not a thing said about the port at Stewart. Would that not have to be taken into consideration?—A. I would certainly think so.

Q. A study of the Hudson Bay railway, for instance, and the initial and ultimate expenditure, would not be complete and would not be an economic study at all without the question of the cost of the development of ports sufficient to handle the traffic being considered?—A. I would say not.

Q. Well, Mr. James, I think that the opening paragraph of this report, which you have signed, is rather pretentious:

The undersigned were instructed to outline the engineering and economic features of the various proposed railway routes for a western outlet of the Peace River country to the Pacific Coast.

I do not think, in view of what you have just said, that you would really say this is an economic study of the Peace River route?—A. I would call it that. With the information and the detail that you would expect to have in that report, it would take one man all his lifetime to gather it together.

Q. You compare it with another route on which there was a complete survey; on what basis could you make a comparison between the two routes and claim it was a reasonable comparison without having made the same kind of survey on both?—A. Well, that is the way we do the work; that is what we are paid for.

By Mr. Jelliff:

Q. Do you think you made a sufficient investigation of the Peace River route so that your judgment would be reliable to any railroad company which might want to build?—A. Yes, sir, I do.

Q. You think you went as far as you should have?—A. For the purpose, yes, sir. If we were going to build a line, of course, we would have to make careful surveys and have to make locations.

By Mr. Kennedy:

Q. In connection with the gradients against outgoing traffic, how did you arrive at that, by the type of survey that you have made; can you figure out grades without instruments?—A. We assume what the grades will have to be. Sometimes we are not exactly right, but we have to do that. We can tell with our aneroids and with the fall of streams how fast a country is falling, and from experience we can tell fairly accurately what the rate of grade will be. A man that has never travelled on the side of a hill probably would not know whether he was going up hill or down, but we get so we can tell whether we are travelling up or down.

Q. You refer to the cost of crossing some of the streams entering the Peace from the south and north between Berwyn and Hudson Hope, and Spirit River and Hudson Hope? Will you tell the Committee where those streams are?—A. The worst crossing we would have would be along these streams here (indicating). They are not very deep and we might have a bridge 200 feet high across two or three of these streams, but they are narrow and they would not be anything like the Lethbridge viaduct, for instance. We would have to cross the Peace River at Hudson Hope, and I do not suppose there is a river of that size that ever narrowed down and gave us as good a chance to cross the river as you will find at Hudson Hope.

Q. Is it not true that you avoid most of these streams running into the Peace by keeping back from the river about 10 or 15 miles?—A. Of course, they are not so deep farther back, but you get on to higher ground and that would mean that you would spoil your .04 grade. That is something that has to be worked out with instruments and by measurements.

Q. Is there any difficulty crossing Pine River?—A. No, there is no great difficulty there.

Q. Any bad grades?—A. Well, the grade is steeper. The Pacific, Great Eastern have a line, I think, all the way over Pine Pass. I know they have run lines well on to the Pass so that if you need those you could get them from the P.G.E.

Q. In connection with the railway survey—would you mind pointing out on the map the Peace River block south of the Peace River?—A. You mean the Government block?

Q. Yes.—A. This is it (indicating).

Q. In the southeast corner we have the Pouce Coupe country; it is very good country?—A. I believe it is.

Q. Could that country be served by a branch line down to the Monkman route?—A. Yes, sir.

Q. Would it be very expensive or hard to build?—A. No; that would come back here (indicating). Here is Grande Prairie (indicating), and if you were going by the Monkman Pass you would come down here (indicating). If you were going down by the Obed route, you would come this way (indicating).

Q. Could you cut straight south from the Pouce Coupe country or would it be necessary to run from the Pouce Coupe country back to Grande Prairie?—A. Yes, it would, unless you go north here (indicating) to Hudson Hope.

Q. Surely, there is a point at the west end of the Grande Prairie district where it would be possible to connect up with the Monkman Pass route and with the Pouce Coupe country?—A. This whole country can be served. If the outlet is this way (indicating) this part of it has a better outlet because it is more direct over here. But if this is the outlet (indicating) this eastern end of the fertile land has the best outlet; they get out this way (indicating). One line

would favour a certain district. No doubt, certain towns would want the Obed line; others would want the Monkman line, and the Peace River people would want to keep on the north side of the river and come out the Peace River and down that way. There is rivalry in that way.

Mr. KENNEDY: Possibly Mr. Hill would tell us about the surveying of that Peace River block and the Monkman route.

Witness retired.

E. M. M. HILL, recalled.

By Mr. Kennedy:

Q. Is there any feasible way by which it can be done, Mr. Hill?—A. Well, the way it is now is about as feasible as possible.

Q. How should the railway run from the Peace River block down the Monkman route to serve these two zones?—A. Well, our present calculations were that we would take the traffic back here to a point west of Wembley, and out that way (indicating). If I understand your question correctly, Mr. Kennedy, you want to know if it is possible to build a railroad from some point here (indicating)?

Q. I was wondering if that Monkman route would serve that territory in British Columbia?—A. It serves it pretty well now. Most of the good land is right there in that block (indicating). Most of the good land in the Peace River block south of the Peace River is in the southeast corner known as the Pouce Coupe district. If I understand your question correctly, you want to know if it is possible for a line to run from that Pouce Coupe area south to the Monkman Pass without going around by Wembley?

Q. Yes.—A. It is possible, but it would only be a little bit shorter than that route now.

By Mr. Jelliff:

Q. How much of a back haul would that entail, if you go down to the south-east there, to Wembley?—A. Thirty or thirty-five miles.

Q. That is not a very large district?—A. No.

By Mr. Kennedy:

Q. Who did the estimating in connection with the acreage suitable for settlement? Who is responsible for that?—A. We all did a part—

Q. You are prepared to speak to that, Mr. James?—A. Yes.

Q. You say you had a placard—what do you mean?—A. I did not say that. I said we all had a part in estimating it.

Q. Will you explain to the committee your method of estimating this acreage?—A. We had dominion maps, some of them soil maps, and coloured maps showing the gradings of land, and showing the percentages of this and that, and we used their figures. I want to say here that I tested out these government maps in different parts of western Canada, and I am surprised at the accuracy of them; I do not see how it is possible to get maps so true.

Q. Did you see any of Mr. Kitto's reports?—A. I have read them.

Q. What does he estimate?—A. I don't know; it is in his book.

Q. In connection with the 75 per cent of the country covered with prairie, or was it 75 per cent of what is within the area?—A. Seventy-five per cent in one estimate and 43 per cent in another.

Witness retired.

The committee adjourned until Monday, March 21st, 1927, at 11 a.m.

SESSION 1926-27

HOUSE OF COMMONS

SELECT STANDING COMMITTEE ON

RAILWAYS, CANALS AND TELEGRAPH LINES

Various Proposed Railway Routes for a Western
Outlet to the Pacific from the
Peace River District

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 3—FRIDAY, MARCH 25, 1927

WITNESSES:

Hon. John Oliver, Premier of British Columbia.

Mr. F. H. Kitto, Field Engineer, Natural Resources Branch, Department of the Interior, Ottawa, Ont.

MINUTES OF PROCEEDINGS

FRIDAY, 25th March, 1927.

The Committee met at 11.00 a.m., Mr. Young (Saskatoon), Acting Chairman, presiding.

Present: Messrs. Anderson (Toronto-High Park), Bell (St. Antoine), Bettez, Blatchford, Bothwell, Bourgeois, Bradette, Brown, Casgrain, Charters, Cowan, Donnelly, Dunning, Edwards (Waterloo South), Embury, Esling, Fafard, Fansher (Last Mountain), Fraser, Gershaw, Giroud, Glen, Heaps, Howden, Jelliff, Kellner, Kennedy, Laflamme, Lovie, Lucas, Luchkovich, McLaren, McIntosh, McKenzie, McLean (Melfort), McPhee, McQuarrie, Milne, Neill, Pouliot, Ross (Moose Jaw), Spence (Maple Creek), Spencer, Stevens, Taylor, Thorson, Totzke, Vallance, Young (Saskatoon)—49.

Bill No. 178, C. N. R. line from Rosedale, southerly, in province of Alberta.

Ordered,—To report without amendment.

PEACE RIVER DISTRICT PROPOSED RAILWAY OUTLETS TO THE PACIFIC

Hon. John Oliver, Premier of British Columbia, was called. He addressed the Committee, outlining the effect which the proposed railway outlets to the Pacific would have upon the Province of British Columbia. Hon. Mr. Oliver filed with the Committee a copy of Chapter 34 of the Statutes of British Columbia of 1912, entitled: "An Act to ratify an Agreement bearing Date the Tenth Day of February, 1912, between His Majesty the King and Timothy Foley, Patrick Welch, and John W. Stewart, and an Agreement bearing Date the Twenty-third Day of January, 1912, between the Grand Trunk Pacific Railway Company and the Grand Trunk Pacific Branch Lines Company and said Foley, Welch, and Stewart." Witness also filed copy of a letter sent by him under date of April 30, 1925, to Hon. Mr. Graham, Minister of Railway, Ottawa, which letter is incorporated in the record. Witness retired.

Hon. Mr. Sutherland of the Government of British Columbia was invited to make a statement, but declined, stating that Hon. Mr. Oliver had covered the subject.

Mr. F. H. Kitto, Field Engineer, Natural Resources Branch, Department of the Interior, Ottawa, Ont. was called and examined respecting studies he has made of the land situation. Witness retired.

The Committee adjourned at 1.00 p.m. until Wednesday, 30th March, at 11.00 a.m.

MINUTES OF EVIDENCE

COMMITTEE ROOM 231,

HOUSE OF COMMONS,

FRIDAY, March 25th, 1927.

The Select Standing Committee on Railways, Canals and Telegraph Lines met at 11 a.m., the Acting Chairman, Mr. Young (Saskatoon) presiding.

The CHAIRMAN: -As the committee knows, some week or ten days ago we met here and at that time we were informed that the Hon. John Oliver, Premier of British Columbia, wished to meet the committee this morning, and address us on the extension of the Pacific coast lines. Mr. Oliver is here this morning, and we would be very glad indeed to hear from him now.

Hon. JOHN OLIVER: Mr. Chairman and hon. members of the committee: I am appearing on behalf of the government of the province of British Columbia. The government of the province is very vitally interested in the question of the western outlet of the Peace River valley, not altogether on account of the volume of grain movement which is expected from that country, but because British Columbia is fast developing into a manufacturing province, and we are naturally looking forward to the time when the coast cities of British Columbia will be the source of supply for the requirements of that province and other portions of the province of Alberta. In addition to the interest in the development of trade and commerce, the province of British Columbia is vitally interested in the matter of this western outlet on account of the fact that the province has a very large amount of money invested in the railway which was intended to form a part of that western outlet from the Peace River valley. Possibly it would make what I have to say more readily understood if I gave an outline sketch of what took place.

In February, 1912, an agreement was entered into between the government of the province of British Columbia and a firm of railway builders known all over the American continent as the firm of Foley, Welch and Stewart, under which the firm undertook to incorporate a railway company and construct a line of railway from the city of Vancouver to the city of Prince George—or Fort George as it was then familiarly known—a distance estimated at 450 miles. That agreement was entered into, as I say, in February of 1912, and was confirmed by a statute of the legislature. The contracting firm undertook to construct, maintain, equip and operate the railway or cause it to be constructed, maintained, equipped and operated. Subject to the conditions of the statute, the province of British Columbia guaranteed the bonds for the construction of that railway to the extent of \$35,000 per mile for an estimated distance of 450 miles. As a part of that agreement, and incorporated in the statute, there was an agreement between the Grand Trunk Pacific Railway Company and the Pacific Great Eastern Railway, and the firm. I may say, Mr. Chairman, that the agreement extended to the heirs and assignees of the Pacific Great Eastern Railway Company, and under that agreement there was to be an interchange of passenger, freight, express and mail traffic, originating on the lines of the Grand Trunk Pacific Railway, and subject to the routing of that company. That traffic agreement was to the effect that all the traffic originating on the Grand Trunk Pacific Railway and destined for points on the Pacific Great Eastern Railway, including the city of Vancouver, would be routed over the Pacific Great Eastern Railway, and, Mr. Chairman, I would like to impress upon this committee this morning this fact; that it was the existence of that agreement which was incorporated as a schedule in the statute.

[Hon. John Oliver.]

which was the determining factor in inducing the province of British Columbia to guarantee the bonds of that railway company. Without that agreement there is no reason whatever for the supposition that the province of British Columbia would have guaranteed the bonds of that railway company. At the time that agreement was entered into, there had been only a reconnaissance survey of the route. The distance was estimated, and during the session of 1914 there was another statute passed, Chapter 65 of the Statutes of British Columbia, under authority of which the distance was increased to 480 miles, the original \$35,000 per mile guaranteed was extended to cover the additional distance, and a further guarantee of an additional \$7,000 per mile over the whole 480 miles was authorized, and subsequently given.

Under the provision of that statute, Chapter 65 of 1914, provision was made for the Pacific Great Eastern Railway Company to extend its line of railway from the city of Prince George to the eastern boundary of the province in or near the land known as the "Peace River Block", and the legislature of the province authorized the guarantee of \$35,000 per mile for the line of railway between Prince George and the eastern boundary of the province. As you know, the war came on, in the fall of 1914, and made it very difficult for railway companies to finance, and without worrying you at length as to reasons, the fact remains that at the 1916 session of the legislature, in addition to the bonds already guaranteed, the province of British Columbia authorized the loaning of \$6,000,000 of money to be raised by the province and loaned to the railway company, in order to carry on its undertakings. The road has been a losing proposition from its inception, or from the inception of its operations, so that the present position is that there has been approximately some \$30,000,000 of money, for which the province is wholly responsible, expended in construction, and between interest and losses in operation, and carrying charges of various kinds, there has been what I may describe as a total loss of approximately \$25,000,000 over and above the \$30,000,000, approximately, which actually went into the construction of the road.

It will probably be within the minds of many members of the committee that both the Canadian Northern Railway and the Grand Trunk Pacific Railway became involved in financial difficulties. If my memory serves me right, the government of Canada first took over the Canadian Northern system in Canada, including the Canadian Northern Pacific system, in the province of British Columbia. Subsequently, they took possession, if not ownership, of the Grand Trunk Pacific railway, and by authority of the Parliament of Canada, these two railways were merged and are now being operated as the Canadian National Railways. The direct effect of that merger was to make the Canadian Northern Pacific railway, from Redpath Junction to the city of Vancouver, available for the traffic of the Grand Trunk Pacific Railway, and as a sequence of that merger, the agreement existing between the Grand Trunk Pacific and the Pacific Great Eastern Railways became inoperative—I think possibly I had better put it that way—it never became operative, as a matter of fact.

It is necessary now to digress for a moment. In the year 1917, the promoters of the Pacific Great Eastern Railway stopped the work of construction which they had been proceeding with up to that time, and declared their inability to proceed, and after a very lengthy investigation, as apparently the only way out—just as it was with the Dominion government and the Canadian Northern system—the Pacific Great Eastern Railway, and all its capital stock, came into the possession of the government of the province of British Columbia, and the government of the province at that time, relying on the value of the agreement with the Grand Trunk Pacific Railway, recommended construction, or carried the construction work on with the intent of completing the road to Prince George, and making that agreement of 1912 operative, as between the Pacific Great Eastern and the Grand Trunk Pacific railway. When the

merger of the two railways took place—I think it was about 1920 or 1921—a doubt arose as to whether that agreement would ever become operative, and the doubt occasioned by that merger, was the determining factor at that time of stopping the completion of the Pacific Great Eastern Railway between the city of Vancouver and the city of Prince George. That is, roughly, the position, and to put it as it presents itself to my mind, I say to you this morning that the government of the Dominion of Canada in carrying out that merger, apparently had no consideration for the position in which it was placing the province of British Columbia in regard to the undertakings of the Pacific Great Eastern railway. It seems to me—in fact, I have no doubt whatever in my mind—that the merging of these two large systems had a tremendously damaging effect upon the future of the Pacific Great Eastern Railway, and I think, in all sincerity, that the province of British Columbia is entitled to some consideration at the hands of this Railway Committee, and at the hands of the government of Canada, because of the damage inflicted upon the undertaking of the province in what was virtually a nullifying of that agreement. As Premier of the province, I have taken a very active interest in this matter, trying to arrive at some position which would alleviate to some extent the very unenviable position of the province with regard to this matter, and I am absolutely convinced in my own mind that the future value of the Pacific Great Eastern Railway depends in a large measure upon the development of the Peace River Valley and also upon the route of transportation which is decided upon for transporting not only the products of that Valley outwards, but for the transportation of their necessities inwards for distribution.

The province was considerably alarmed at the proposal advanced several years ago to connect the Edmonton and Dunvegan Railway by a north and south line with the main line of the Canadian National Railways. I have read and studied the report of the engineers who have reported to you on that matter, and I want to say to you this morning that in my opinion, and representing the people of British Columbia, we believe that the construction of a north and south line at a point east of the Rocky Mountains, connecting the Edmonton and Dunvegan Railway with the main line of the Canadian National Railways, will have a very damaging effect upon the prospects of the Pacific Great Eastern Railway in which the province has invested so much money.

I want to say further that, after giving a great deal of study to the situation, I do not believe that it is in the interest of Alberta or the Peace River Valley that those north and south connecting lines should be built in lieu of a more westerly line. To put it shortly, I would say this: I have acquired from reading—not from personal observation—a very high appreciation of the possibilities of the development of the Peace River Valley. I know something of the topographical features of the country, having read the reports made by the engineers which you have had before you, and more particularly in view of the information which I believe to be correct, that by far the larger portion of the agricultural land in the Peace River Valley lies to the north of the Peace, the conviction has been impressed very strongly on my mind that to have in view the full development of the potentialities of that country, an east and west line on both sides of the Peace River should be indicated. The maps that you have had before you, no doubt, show you that position.

As I understand it, those lines, proceeding westerly through the Peace Valley, would come to a junction in the vicinity of Hudson Hope. I am advised by men who are here in the city, and also from Departmental reports, that at Hudson hope there is a very large deposit of the best grade of coal known anywhere in the Dominion of Canada. I am advised that there is a large water-power in the Canyons of the Peace River which could be developed for industrial purposes. The reports of our provincial Mines Department show very clearly

that in the territory to the west of Finlay Forks there is, in the Omineca River and Ingenika River, generally spread through what is known as the Omineca District, a very heavily mineralized block showing prospects particularly in silver and lead ores equal to anything that has yet been developed in Western Canada. I am advised that along the Finlay River from Finlay Forks northwest there is available for light draught sternwheel steamers navigable water extending due north a distance of almost seventy-five miles. I think you have had before you during this session of Parliament reports of engineers which show it is quite practicable to obtain a line of railway along the north side of the Peace River via Finlay Forks and from Finlay Forks southward to Fort George, a line of railway with gradients not exceeding one-half of one per cent. I am advised that along the streams which centre at Finlay Forks, the Finlay River and its tributaries from the north, the Omineca, Ingenika and Nation Rivers from the west, and the Crooked and Parsnip Rivers from the south, there is an immense amount of timber, some of it suitable for milling purposes and much of it suitable for pulp-wood purposes; that there is an immense mileage of water which is available for the driving and floatation of timber to a central point at Finlay Forks, which will, in the years to come, produce an immense tonnage.

I would like to advance this principle for the consideration of this committee. It is generally an accepted fact to-day that Canada has altogether too much mileage of railways for her population, too much mileage of railways for the available tonnage; that is a commonly accepted theory. I am not going to debate that phase of it, but I would like to place before this Committee the declaration of a principle, and I would state that principle as something like this: That in undertaking the future construction of railways in the Dominion of Canada, great care should be taken to see that that railway construction is so located that it will form part of a permanent transportation system, having in view the full development when the country is developed to its maximum. I want to state to you that there should be no railway construction at the present time that does not fit in with that principle; that whenever a railway is constructed at the present time it should be built as a part of a permanent and full development of transportation means.

If you examine the physical features of the Rocky Mountain region, particularly on the Pacific slope, you cannot help being impressed with the thought that nature has indicated with extreme clearness the most economic routes for transportation. Starting at the coast with the city of Vancouver you have the valley of the Fraser River extending almost in a direct north line to the city of Prince George. At Prince George the Fraser River turns easterly and southerly and the present Canadian National Railways follow that valley from Prince George near the head waters of the Fraser and on to the head waters of the Yellow Head. No one will dispute for a moment that nature has laid out that line as a route for transportation. But if you will go back again to Prince George and look to the west you will find that your Grand Trunk Pacific System follows the Nechako River and the Indaka River over the low divide to the head waters of the Buckley and follows the Buckley and the Skeena down to the coast. If you will come back again to the city of Prince George and look to the north you will find within a few miles of the Fraser River that nature has provided a natural pass by way of the Graham River and Summit Lake to the head waters of the Crooked, Pack and Parsnip Rivers—I am using interchangeable terms. Nature has laid out a north and south line of communication directly from the Pacific coast to the city of Prince George, and from Prince George to Finlay Forks, following the Finlay River and its tributaries directly to the northern boundary of the province of British Columbia. When you are at Finlay Forks you have, just as you have at the Yellow Head, a natural pass laid out by nature following the Peace River down stream to the open prairies of Alberta. Start again at

Finlay Forks and proceed westward and you find the Omineca or the Ingenika Rivers coming into Finlay Forks and again indicating a line of communication almost due west from Finlay Forks in the general direction of either Hazelton on the Grand Trunk Pacific or the port of Stewart.

I am not here to say that railway construction in that northern territory would be justified at the present time. What I am here for particularly to-day is to try and impress upon this Committee that there should be no action taken which would further endanger the investment made by the province of British Columbia; which would further depreciate the value of that investment. I would like to point out to you that at the session of the Legislature held in November of 1925 they authorized the granting of 16,000,000 acres of the public lands of the province of British Columbia in aid of the completion of the Pacific Great Eastern Railway to the eastern boundary of the province.

In three months time we are going to hold a great celebration of the Diamond Jubilee of the birth of Confederation. I want to say to you that the success of Confederation depends very largely upon the spirit of coöperation which will exist between the people of the different parts of Canada. You would not be giving effect to my conception of that spirit of Confederation if you refused to give consideration to the position in which the province of British Columbia is placed in connection with its railway problems.

I think it was in April of 1925 when Premier Greenfield from Alberta, and myself, with the Rt. Hon. G. P. Graham, then Minister of Railways, met President Thornton and President Beattie to discuss this situation. In trying to place the position of British Columbia before these men of large influence, I took the position that I take to-day; that unless the Government of Canada is prepared along with railway construction to adopt a very vigorous policy of colonization, so that synonymous with the railway construction there will be a pouring in of a population which would produce the tonnage that would make that railway transportation a paying proposition, then further railway construction would not be justified. I believe that a proper policy of coöperation between the provinces of British Columbia and Alberta, the Government of the Dominion of Canada and the Imperial Government could produce those results. There are workless men in the Old Land and there is plenty of capital available there, and it only requires courage and determination to bring those workless men in touch with the opportunities of Canada to afford an opportunity to them to become permanent residents of the British Empire, to help to develop northern Canada, and at the same time benefit themselves and benefit the Empire.

These are the views which I wish to lay before you this morning for your consideration. I want to try to impress upon you that there should be a policy of constructive coöperation, not a policy of destructive criticism, which would only make a serious situation worse than it is at the present time. I say that that situation is far from hopeless; I say that it is a situation that should be met and met successfully, and there has got to be a well thought out line of policy followed by the necessary vigorous action in order to make it work out successfully.

I would like to leave with you, Mr. Chairman, the copy of the Statutes to which I referred containing the agreement between the province and the promoters of the Pacific Great Eastern Railway. I want to try to convince the members of this Committee that British Columbia has an absolutely just claim for sympathetic consideration in regard to the western outlet from the Peace River Valley.

Mr. EDWARDS (Waterloo): I would just like to ask Mr. Oliver what negotiations have been carried on by his government with the idea of disposing of the railway to either one of the big lines?

[Hon. John Oliver.]

Hon. Mr. OLIVER: I might say to my friend that the Presidents of both the Transcontinental lines have been fully advised of the position of British Columbia in this matter, and they have not yet seen that the time has come when they can take hold of this matter; at all events that is the impression left on my mind.

Mr. BROWN: What gaps are there still between the ends of construction?

Hon. Mr. OLIVER: Starting at Vancouver there are about twelve miles in operation as a local line. From the end of that twelve miles to Squamish, along the shores of Howe Sound, no construction has been done. I think the distance is 26 or 27 miles. From Squamish to Quesnel the road is in operation. From Quesnel seventeen miles north to the crossing of the Cottonwood River the road was graded and steel was laid. The road was graded all the way from Quesnel to Prince George but has become deteriorated. At the Prince George hill, from Prince George to Stony Creek, a distance of approximately 21 miles, steel has been laid but it has not been ballasted or put into operation. Between Quesnel and Prince George there is a gap of about 45 miles in which there is some expensive bridging to be done; the grade would have to be restored and track laid. The last estimate we had to complete from Quesnel to Prince George was approximately \$1,700,000. To complete the gap at the south end, between Squamish and Vancouver, it is estimated to costing from \$2,250,000 to \$2,750,000. To be absolutely on the safe side, from the best information which I have been able to obtain, I would say that approximately \$5,000,000 would be required to complete the road from Vancouver to Prince George. Along with that \$5,000,000 some of the trestle bridges, which have now been built for something like 13 years, will have to be replaced within the next three years. We have estimated that for a three-year period of betterment, principally in making fills where there are trestles now or renewing the trestles where a fill is impracticable, we would have to expend approximately \$3,000,000 in betterments during the next four years.

Mr. KELLNER: What is your investment in that road?

Hon. Mr. OLIVER: If you would describe what you mean by "investment" I could answer possibly more correctly. The money put into actual construction approximates closely to \$30,000,000; that is, that actually went into construction. To put it another way; it would cost you \$30,000,000 to reproduce what is now actually on the ground, with possibly some allowance for depreciation and trestle bridges.

Hon. Mr. DUNNING: What is the total of the outstanding bonds?

Hon. Mr. OLIVER: The total of the outstanding bonds is \$20,160,000. Of the money that has gone in to that road a considerable portion of it has been met out of current expenditure, and what has not been met out of current expenditure is an outstanding indebtedness against the provinces in the way of provincial bonds. Accounts are kept as between the government and the railway which show everything, accumulated interest and everything of that kind.

Mr. ANDERSON (Toronto-High Park): What portion of the \$30,000,000 is bonds?

Hon. Mr. OLIVER: Of the \$30,000,000 there is \$20,160,000 of guaranteed bonds outstanding on which the interest has been fully paid, and we have started a sinking fund to retire a portion of them at maturity.

Mr. ANDERSON (Toronto-High Park): The engineers have stated that the construction from Squamish to Vancouver is very costly; what have you to say to that?

Hon. Mr. OLIVER: Well, it follows a rocky shore line.

Mr. ANDERSON (Toronto-High Park): Is there an alternative?

[Hon. John Oliver.]

Hon. Mr. OLIVER: There is an alternative, but it means going over a divide, which means gradients and more excessive cost of operation, and it gets you away from the water for industrial purposes.

Mr. ANDERSON (Toronto-High Park): What would the alternative be, Mr. Oliver; give us an idea of what it would be?

Hon. Mr. OLIVER: There might be some little saving in the cost, but I do not think that the saving in the cost would be a sufficient justification for adopting the alternative route.

Mr. ANDERSON (Toronto-High Park): Can you suggest between what two points that alternative would be; would it connect with the Canadian National?

Hon. Mr. OLIVER: The connection at North Vancouver would be with the terminal line built by the Vancouver Harbour Board, which in turn connects with all other railways. In other words, the Harbour Board, as I understand it, in Vancouver are constructing a terminal railway around the Harbour which would connect with all other railways. I think Mr. Stevens would be able to advise you better on that.

Hon. Mr. STEVENS: Yes, that is correct. They are building what they call a terminal railway which crosses over the second Narrows bridge, and then goes along the north shore and will connect with the Pacific Great Eastern, the C.P.R., and the Canadian National.

Hon. Mr. DUNNING: Mr. Oliver, can you tell us what the province has put into that road, including responsibility for the bonds, the capital investment and the accumulated deficit?

Hon. Mr. OLIVER: The position is this, Mr. Dunning. I can tell you approximately, and I think that will be near enough. The closest computation I can make is that which is brought up to the 30th of June, the end of the railway year. At the end of the 30th of June last, it was approximately \$52,500,000, all told. That was the amount standing against the railway as between it and the government. We estimate that that will be \$55,000,000 at the end of the 30th of June next.

Hon. Mr. DUNNING: That would include the interest that you paid on the bonds?

Hon. Mr. OLIVER: That includes interest on the bonds, everything you can charge.

Mr. EDWARDS (Waterloo): How does that compare with your original estimate on the road?

Hon. Mr. OLIVER: The original estimate on the road—I am speaking now from memory—from Vancouver to Prince George was something like \$27,000,000 or \$28,000,000.

By Mr. Heaps:

Q. Could you tell us, Mr. Oliver, what the deficit was in the last operating year?—A. No, not exactly, but it would be between one-quarter of a million and three hundred thousand dollars.

Q. That was the operating deficit?—A. Yes.

Q. What would be the total deficit?—A. The total deficit, including interest on the whole capital—it depends again on how you put it; your interest on the bonds is a little over one million dollars a year, and if you compute the interest on \$52,000,000 of capital at five per cent, you have approximately \$2,500,000 interest charges. There is a whole lot in how you figure it, as the Minister of Finance can probably tell you.

Q. But taking the original construction of the road and the operating deficit—A. The original construction cost, as closely as I can approximate it, is about

[Hon. John Oliver.]

\$30,000,000, or probably a little under that. If you take five per cent of that it would be \$1,500,000, and \$300,000 loss of operation would be \$1,800,000 annual loss.

By the Chairman:

Q. What is the total mileage now in operation?—A. I think 370 miles.

By Mr. Bell (St. Antoine):

Q. What is the total length of the road?—A. The total length from Vancouver north to Prince George is about 480 miles.

Q. You were speaking about co-operation, and I understand the province of British Columbia has offered a subsidy of 16,000,000 acres to whoever will complete the line. Have you any solution to offer to the committee?—A. I think that would not be just the correct way of putting it. The province of British Columbia has authorized the endowment of the Pacific Great Eastern railway with that land grant, and the intention of passing that legislation was to make the disposition of the railway to a competent corporation more attractive; in other words, to enable us to make a better bargain for the disposition of the road. This is not an offer of a bonus; it is put through in the shape of an endowment of the railway with that amount of land, the intention being to make the road more desirable as a purchase proposition to somebody who might be interested.

By Hon. Mr. Dunning:

Q. That is conditional upon the purchaser finishing the line to the eastern boundary of the province on the Peace?—A. Undoubtedly. The land grant is divided into two sections; one portion applies to the railway between Prince George and Vancouver and may be dealt with entirely separate from the other.

By Mr. Edwards (Waterloo):

Q. And the other extension is east to the boundary?—A. Yes.

Hon. Mr. DUNNING: Here (indicating) is Prince George; here (indicating) is the Peace; the eastern boundary of the province is here (indicating), so the line will roughly run like that (indicating).

Mr. BROWN (Lisgar): That is 480 miles?

By Hon. Mr. Dunning:

Q. How far is that, Mr. Oliver?—A. The distance from Prince George by way of Finlay Forts to the eastern boundary of the province will be from 400 to 420 miles; the estimated distance from Prince George by way of Pine Pass was 330 miles, and that was the distance for which a guarantee was authorized.

Hon. Mr. DUNNING: That links up with what we are discussing in the committee, according to Mr. Oliver's suggestion, it would be linked up this way and this way (indicating).

Hon. Mr. OLIVER: The land grant could be made applicable without doubt to either of the routes, either by the Pine Pass or Peace Pass. I do not think there will be any difficulty about that. We put an engineer over the route starting in at Vanderhoof—that is about 60 miles west of Prince George—in 1920, to make a reconnaissance survey there, and he advised that a very easy line could be had, and that the construction by way of Finlay Forts, while it would be approximately 100 miles longer, would not cost any more than by way of Pine Pass.

By Mr. Anderson:

Q. Then the cut-off from Aggie to the Canadian National through Alberta would not be any particular help to British Columbia?—A. I think it would be

[Hon. John Oliver.]

a positive damage. I cannot conceive a line from Aggie to Obed being part of a permanent system; to my way of thinking it would be simply temporary, and it would delay the time for the construction over the permanent route.

Q. Should not the development of the Peace River country in Alberta and British Columbia go along together, and be treated as one matter, rather than as separate entities?—A. Undoubtedly.

Q. Then what would you suggest?—A. I embraced my thought in the matter in a letter addressed to the Minister of Railways dated 30th April, 1925; it is a somewhat lengthy communication—

Hon. Mr. DUNNING: I have it; it is on file.

Hon. Mr. OLIVER: It is filed with the Department. Briefly, it was this, that there should be a co-operative effort in which British Columbia, Alberta, the Dominion government and the Imperial government should all be linked up together.

The CHAIRMAN: Would you like this letter in the record?

Hon. Mr. OLIVER: I have no objection; I will file it if you wish.

Letter filed as follows:—

HOUSE OF COMMONS, CANADA

OTTAWA, April 30, 1925.

Hon. GEO. P. GRAHAM,
Minister of Railways,
Ottawa.

Re Transportation Facilities for the Peace River District

DEAR MR. GRAHAM,—At the present time this district is served by the Edmonton-Dunvegan and British Columbia Railway and the Canada Central Railway. The E. D. & B. C. Railway extends from Edmonton via Little Slave Lake, McLennan Junction and Spirit River to Grande Prairie, with a short branch line from near Grande Prairie to Wembley. The Canada Central extends from McLennan Junction to Whitla, a point north of the Peace River. The total combined mileage is 493.

It is alleged that a number of settlers have left the district and others have been deterred from settling by reason of want of transportation facilities and excessive rate charges. These allegations I believe are true in statements and in fact.

It is also alleged that grain is hauled with teams 75 miles to the railway and that it costs 43 cents per 100 pounds freight to move wheat from Grande Prairie to Winnipeg, and 39½ cents per 100 pounds to Vancouver. These rates are considered prohibitive.

Notwithstanding the high rates charged it is alleged that neither of these railways has earned operating and maintenance costs.

With a view to obtaining more and better service at less cost and the retaining and increasing of the present population, the Government of the Dominion are being urged to provide for the construction of more railway mileage.

The construction of a railway from McLennan Junction to Brule via Sturgeon Lake with a branch line to Grande Prairie is strongly advocated by some persons. In support of this it is urged that such a line would shorten the mileage to Vancouver and that shortening would result in a lesser rate being charged, and that a larger net return would accrue to the producer, and that a further result would be the retaining of the present population and causing a new influx to occur.

I do not believe for a moment that any such result would follow. My reason for such a belief is that the proposed railway would traverse

[Hon. John Oliver.]

a very large extent of non-producing territory. That it would be dependent for the major portion of its business on traffic originating upon or destined to points on the present E. D. & B. C. Railway. That the maintenance and operation of the present E. D. & B. C. and Canada Central Railways would have to be continued in order to collect traffic for the new railway. That the new railway in order to earn, even at the present high rates, operating expense would have to act as a robber of the present railway system. That the combined earnings of the proposed new and existing railways even at the present high rates would not equal operating and maintenance charges and that the interest on capital investment would have to be provided by increased taxation.

The E. D. & B. C. Railway is well located either as to furnishing an eastern outlet, or as forming part of a new line between Edmonton and the coast of British Columbia, and is well designed for the service of the intermediate country traversed thereby.

A glance at the map of Northern Alberta issued by the Department of the Interior shows that the E. D. & B. C. Railway is located almost through the centre of the surveyed areas of agricultural lands and it is a fair assumption that the unsurveyed areas are not suitable for settlement purposes under present time conditions.

There can be no reasonable doubt that the promoters of the E. D. & B. C. Railway had in mind a continuous line of railway from Edmonton to the Pacific Coast by way of either the Pine or Peace River passes through the Rocky Mountains. Whilst the promoters of the E. D. & B. C. Railway were active on the east side of the mountains, other interests were also active west of the mountains.

In January 1912 a contract was entered into between the Grand Trunk Pacific Railway Company and Messrs. Foley, Welch and Stewart whereby the latter undertook to build the Pacific Great Eastern Railway between the city of Vancouver and the city of Prince George, the latter being an important point on the line of the Grand Trunk Pacific. The Pacific Great Eastern Railway was intended to be a part of the Grand Trunk Pacific system and some 400 miles of this railway is either in operation or ready therefor. There remain some 76 miles of partially constructed railway yet to be completed.

The Pacific Great Eastern Railway was designed not only to connect the Grand Trunk Pacific with Vancouver but also to connect the E. D. & B. C. Railway with the Grand Trunk Pacific at Prince George, and thus provide a continuous line of railway from Edmonton through the Peace River district to the Pacific coast with terminals both at Vancouver and Prince Rupert.

To obtain an intelligent conception of the connection of the Pacific Great Eastern Railway with the Grand Trunk Pacific it is necessary to carefully consider the provisions of Chapter 34, Statutes of B.C. 1912, and the schedules thereto, and also Chapter 65, Statutes of B.C. 1914.

Having in view the development of the Peace River district to its full capacity upon the most economic basis and applying the same principle to the territory necessary to be traversed I would say emphatically that I believe the E. D. & B. C. Railway to be well located and that it will fit admirably in as a part of a permanent transportation system.

Looking at conditions as they exist to-day and having in mind full and economic development upon a permanent basis I would say without any hesitation that a line of railway through the Peace River pass connecting the E. D. & B. C. Railway with the Grand Trunk Pacific and the Pacific Great Eastern at Prince George is the best solution possible.

The policy herein recommended would protect to the fullest possible extent investments already made and would inflict injury upon none, and I think it is the only possible policy that would have that dual effect.

The working out of this policy would involve the extension of the E. D. & B. C. Railway from Spirit River or from Grande Prairie to a junction with both the G. T. P. and the P. G. E. at Prince George. It would further involve the extension of the Canada Central Railway from its present western terminus to a junction with the E. D. & B. C. Railway at or near Peace River Canyon.

In connection with the proposed railway construction I have thought that by the use of heavy grades and sharp curvatures where necessary and by the development of hydro-electric power in the Peace River Canyon, that it might be possible to produce an electrically equipped railway at a cost not exceeding the cost of a standard steam operated railway, and that a large surplus of hydro-electric power suitable for the milling of grain in transit and for other industrial purposes might be available.

The policy outlined will require the expenditure of a large amount of money and the present volume of business may not warrant further capital expenditures. Any policy adopted should afford a reasonable assurance that in a short time the returns from the expenditure made would be sufficient to meet operation and maintenance as well as interest charges, and eventually liquidate the original capital outlay.

Is it practical to justify the necessary expenditures by the production of a sufficiency of revenue, and if so, how is it to be done? A careful and conservative survey of available resources should be had and a liberal estimate of expenditures and time necessary to develop the resources so as to provide a volume of traffic sufficient to make the railway pay should also be made. The methods to be employed and the costs incurred in procuring the necessary population and development should be considered. There are many other factors also but generally speaking settlement and development upon a sufficiently large scale is imperatively necessary to accompany railway construction. Any other course would be madness.

With the view of securing the necessary railway construction and settlement and development I would favour the opening of negotiations with either or both the Canadian National Railways and the Canadian Pacific Railway to acquire, construct, operate and maintain the necessary settlement and development. I would place at the disposal of the Corporation entering into the necessary agreement sufficient of the lands and other resources of the territory to be developed, the conveyance of such lands and resources to be subject to such conditions as to terms of sale, taxation and royalties as would be fair and equitable, having regard to the welfare of the population and the need for public revenue.

In the event of failure to reach a satisfactory agreement with either of the Canadian National or the Canadian Pacific Railway I would favour an agreement with a corporation to be formed, which corporation should possess ample resources to carry out the terms of any such agreement which they might enter into.

I understand that the Imperial government are assisting in placing some of their surplus population in Australia and New Zealand, and I would, in the event of any agreement being entered into for railway construction, settlement and development purposes co-operate with such agreeing corporation in securing from the Imperial Government such aid as might be possible in furthering the terms of such agreement.

Should an agreement for railway construction, settlement and development along the lines indicated be available, I am prepared to recommend to His Honour the Lieutenant-Governor of British Columbia, the calling together of the Legislature for the purpose of authorizing a grant of public lands and for confirmation of the terms of such an agreement insofar as the Province of British Columbia would be affected thereby.

The investment made by the Province of British Columbia in the Pacific Great Eastern Railway was very seriously affected by the merging of the Canadian Northern Pacific and the Grand Trunk Pacific Railways, and naturally I do not wish any further impairment of the value of such an investment.

I prefer the route by the Peace River Pass to that by the Pine Pass for the reason that the Peace Pass is more suitable for the bringing together of those lines of railway which it is suggested should be constructed both on the north and south sides of the Peace River. The Peace Pass also affords a better grade and with the railway to the forks of the Finlay River, the Omineca district, which is heavily mineralized, and the valley of the Finlay River to the north, might both be reasonably expected to produce considerable traffic, and probably in the future a line of railway would connect the forks of the Finlay with the port of Stewart on the Portland canal.

I regret that I have not more positive and definite information as to the resources of the Peace River district. I am somewhat inclined to doubt some of the glowing reports I have heard, but even after allowing a large margin for exaggeration I feel sure that the resources of the area to be traversed by the railway herein referred to will, if developed concurrently with railway construction, be ample to warrant such construction.

I am satisfied that it is possible by hard driving to develop those resources sufficiently fast to warrant the railway construction now. In any event, the future hope of Canada is through increased production and such will not come without striving therefore.

The natural formation of the country indicates the most economical lines of transportation and these natural advantages should not be lightly cast aside as of no account. I think that in the future development of Northern British Columbia the valleys of the Peace, the Parsnip, the Finlay, the Omineca and the Skeena will offer the best locations for lines of communication and transport.

The advice of expert engineers must necessarily be had as to the cost of construction, and such costs must necessarily be a large factor in the choice of location, but engineers have been known to make very serious errors both as to costs and as to the location, and I am not prepared to subscribe to the suggestion that the location of lines of communication and transportation should be left to the decision of any railway engineer. The responsibility is a Government responsibility and one that cannot be deputed to others, and I think that now is the proper time to outline a policy and to start the wheels of progress moving forward.

I am,

Yours very truly,

(Signed) JOHN OLIVER."

By Mr. Anderson:

Q. Have you made any advance, Mr. Oliver, to get your suggestion carried out, and if so, what has been the success, if any?—A. In reply to the hon. member, I will say that it appears that British Columbia seems to be the least in the estimation of the four parties. I have gone as far as it is possible for me to go alone, and I have failed to enlist the co-operation of the other people. You wanted it straight, and you have it.

By Mr. Edwards (Waterloo):

Q. Is not Alberta interested in the Edmonton and Dunvegan line?—A. Alberta owns the Edmonton and Dunvegan but—and I want to be absolutely fair—Alberta does not own the public lands.

By Mr. Donnelly:

Q. Where is this 16,000,000 acres?—A. Part of it lies south of the block and part to the west. There are two blocks down in the Lillooet district south of Fort George

By Mr. Edwards (Waterloo):

Q. Is that what is known as the Peace River block in Alberta?—A. No, the Peace River block is entirely in British Columbia.

By Hon. Mr. Dunning:

Q. That (indicating) is known as the Peace River block?—A. Yes.

Q. And the Lillooet land is to the south of that?—A. The land south of Prince George is the land authorized to be granted—land to the south of the Peace River block and west of it, particularly adjoining it.

Q. But not a part of the block?—A. No; we have no idea of wanting to give away what belongs to other people.

By Major Bell (Deputy Minister):

Q. Does it carry mineral rights?—A. Yes, subject to certain conditions.

By Mr. Bell (St. Antoine):

Q. Was there anything in the letter, Mr. Minister from Mr. Oliver, about this 16,000,000 acres?

Hon. Mr. DUNNING: The letter was not to me, but to my predecessor, and was previous to the authorization which Mr. Oliver has mentioned.

Hon. Mr. OLIVER: In the letter I suggested to the Dominion government, which owns the public lands in British Columbia, that if it was a matter of money, why not set aside an immense area subject to colonization conditions, or go back to the old theory of the construction of the C.P. Railway and build it out of the value of the territory to be developed. That was the proposition contained in the letter. And following out the suggestions made in that letter, at the next session of the Legislature, we authorized a land subsidy.

By Mr. Anderson:

Q. You still advocate the completion of the road up to Prince George?—A. I will tell you what I will advocate if you will tell me what the Parliament of Canada will do.

Mr. ANDERSON: We cannot do that.

[Hon. John Oliver.]

By Mr. Anderson:

Q. But, in the interest of British Columbia, you say that ought to be done?—A. It has to be done sooner or later; it is only a question of time.

Q. That really leads into the Peace River country?—A. In the time to come, I have not the slightest doubt that there will be a line of transportation generally following the Fraser valley to Fort George, and following that natural line down the Parsnip River and up the Finlay practically to the northern boundary of the province.

Q. What area of good country south of the Peace River is in British Columbia?—A. I am not capable of answering that question.

Q. Is there as large an area north of it?—A. I do not know; I am not here to make a guess; there are others here who will admit they have made guesses, but I am not guessing.

By Mr. Kellner:

Q. You stated a while ago that no action should be taken which would jeopardize the position of British Columbia. Does that mean if there was an outlet to the Peace River, it would have to take in the Pacific and Great Eastern line? —A. No, I do not think that is necessary, but I say it will be a rough deal for us if it does not.

Q. And a little bit later, you stated it would be a rough deal if the E.D. & B.C. linked up with the National line?—A. No, I did not say that.

Q. Not in those words, but if I recollect your statement correctly, you said it would be somewhat detrimental to the interests of British Columbia.

A. I think you have been reading some newspaper reports. I think I made it clear this morning when I said that any line that would connect the Edmonton and Dunvegan with the Canadian National east of the mountains would detract from the value of the Pacific Great Eastern Railway.

By Mr. Kennedy:

Q. Is it not true, Mr. Oliver, that any line going to Obed, Aleza Lake, or Prince George, if built by the Canadian National, would give it control of the traffic?—A. Now, Mr. Kennedy, I will not admit that is so; I will not admit there is no value in that signed and sealed agreement we have with the Grand Trunk Pacific.

Q. But outside of the agreement?—A. Outside of the agreement I would say yes.

Q. The P. G. and E. was first conceived as a link between Prince George and Vancouver?—A. Apparently; that would be my judgment from the records of those men who were concerned in that in its inception, and who claim that it was the intention to go through to the Peace River valley right from the first, but that was not shown in the statute.

Q. Well, it was shown later in the legislation of 1914, I think, that they intended to go through to the Peace River country?—A. There was authority there for the company to build to Peace River, and there was a \$35,000 per mile guarantee for their bonds, and that is a pretty good indication.

Q. In your statement, Mr. Oliver, that the Parliament of Canada should not do anything to further jeopardize the investment in British Columbia in the P. G. and E., are we to take it that your position is that no outlet should be built from the Peace River country to the coast, which will not utilize the P. G. and E?—A. No. Mr. Kennedy, I am not making any such statement as that.

By Hon. Mr. Stevens:

Q. Mr. Oliver, in order to get your position clear; do you recommend from a British Columbia standpoint the construction of the line via the Peace River pass,

[Hon. John Oliver.]

and from Finlay Forks to Fort George?—A. Absolutely; but I want to qualify that by saying that railway construction without colonization, and production of tonnage, is not justified.

Hon. Mr. DUNNING: Mr. Chairman, I was about to suggest that possibly the committee might see its way clear to extend to Mr. Oliver the privilege of questioning the engineers if he feels disposed so to do. It is a matter of courtesy which I feel sure the committee will grant.

Hon. Mr. OLIVER: I can assure you, Mr. Chairman, that I appreciate the suggestion made by the Minister of Railways, but I am not going to avail myself of the opportunity.

The CHAIRMAN: Does anyone wish to ask Mr. Oliver any questions?

Mr. KENNEDY: I would like to ask one further question in relation to another question that was asked in regard to Alberta not coöoperating. I think it is true that a railway service such as this obtained by settlers in the Peace River block of British Columbia is actually furnished by the Alberta government.

Hon. Mr. OLIVER: For fear there may be a misunderstanding, I did not say and did not intend to infer that the Alberta government had been in any way remiss in attending to the requirements of their constituents. What I did mean to say was—and I think the committee will easily understand it—that in the scheme of coöperation which is suggested as between the two provincial governments, the Dominion government, and the Imperial government, I had had no coöperation, and it was to that aspect of the matter that my remarks had reference.

Mr. KENNEDY: That was simply to clear up the question.

Hon. Mr. OLIVER: Yes.

By Mr. Ladner:

Q. May I ask you a question with respect to the possible timber, mineral, and agricultural resources of the Pacific Great Eastern? No reference has been made to them.—A. I am not sure that I get your question.

Q. What are the resources along the line tributary to it?—A. The Pacific Great Eastern Railway from the coast inland generally follows the valley of the Fraser, or a short distance from it. It is, in the aggregate, a mountainous region; there are valleys which carry a considerable amount of timber. The Quesnel country carries an enormous amount of timber, just as there are at Finlay Forks many hundreds of miles of waterways which can be used for the purpose of floating timber to a central point. You have a similar condition at Fort George; in fact, I think at Fort George you have waterways capable of floating timber to a central point at Fort George, probably, which are unequalled on the continent of America—enormous areas of timber which will be tributary there, and which could be economically brought to a common point. You have another condition at Quesnel, in which there are hundreds of miles of waterways tributary to that point; you have the Quesnel River, heading into Quesnel Lake; you have the Cottonwood and its tributaries; you have the Black Hawk and its tributaries, as well as a vast number of smaller streams emptying into the Fraser, and all of them are capable of floating timber to a common point on the railway. You have on the proposed route three centres capable of immense industrial expansion, Finlay Forks, Prince George and Quesnel, and in addition to that at various points on the railway you have water-power capable of immense development. There are different points on the line of the Pacific Great Eastern Railway where power can be economically generated for the operation of the line all the way from the coast right into the Peace River, without burning a pound of coal or other fuel; you have the Green River Falls

[Hon. John Oliver.]

which, taken alone, I believe would generate sufficient power to electrify the whole line; at Bridge River located on Seton Lake, which the British Columbia Railway is now developing, you have an effective head of 1,240 feet, capable of producing over 800 pounds pressure to the square inch. I have seen the reports of various engineers as to the power which could be generated at Bridge River, and the lowest estimate I remember reading was 240,000 horse-power and running from that up to 400,000 or 450,000 horse-power, with a system of conservation. You have power to be generated there, unlimited power for the railways, and almost unlimited power for manufacturing, for the milling of wheat in transit, and for other industrial purposes. The railway is not barren of resources; in fact, it has vast resources. The particular question appears to be: Can these resources be economically developed at the present time? That they will be developed and furnish ample tonnage for the railway is an absolute certainty; it is only a question of time.

By Mr. Edwards (Waterloo):

Q. How are the grades on the road? Are they heavy?—A. The maximum grade is less than the maximum grade of the main line of the C.P.R. through the mountains. The maximum grade is 2.2 per cent.

By Mr. Kennedy:

Q. Any route, Mr. Oliver, which would assist the development of the Peace River country, would be of immense value to British Columbia?—A. Yes, a road which would develop the Peace country or any part of Alberta would be of value to British Columbia; no question about that.

By Mr. Anderson:

Q. Mr. Oliver, as I understand it, we are considering the question of the extension of railways into the Peace River for the purpose of the development of that country, and we have a very extensive report here, in which it is recommended that a line be constructed from the Edmonton and Dunvegan right down to the Canadian National, as being, as I have mentioned before, the proper remedy; you say that will be damaging to British Columbia? Would you suggest, for our information, and to help us, what we should do to immediately carry out that idea?—A. I do not read the engineers' report in that way; I read the engineers' report to say that it is more economical to carry the present tonnage around by Edmonton than to build that route, and I agree with that.

Q. But that does not help British Columbia out?—A. It does not help us out, and it does not damage us any worse than we are damaged now.

Q. I understood you to say it was setting you back in the future?—A. No, I say that the construction of the line between Aggie and Obed would be a setback to permanent development.

Q. Have you had any negotiations with others interested, other than the railways you have mentioned; that is, with British interests or Canadian interests or American interests?—A. Yes, I have had communications from many sources, but I am not at liberty to state what these are at the present time. I find in endeavouring to carry on negotiations that people say "Our connection with this matter must not be published, until we come to a point where we have an agreement", and they say, "We will not permit our names to be coupled up with something that does not materialize."

By Hon. Mr. Dunning:

Q. Mr. Oliver, I would like to ask you a few questions in the direction of the larger picture to which you referred, and the questions will all be based upon

[Hon. John Oliver.]

the idea that this committee is considering something which it is intended should be acted upon by the Dominion Parliament if at all, and through the medium of the Canadian National Railways. I want you to keep that in mind as the basis of the questions.—A. Yes.

Q. The E. D. and B. C. Railroad is at the present time owned by the government of Alberta?—A. Yes.

Q. And I think I am correct in saying their total capital investment is in the neighbourhood of \$20,000,000 regardless of accumulated deficit—I do not think accumulated deficits are included. Your investment in the P.G.E. is, say, \$30,000,000, regardless of accumulated deficits?—A. Roughly speaking, yes.

Q. The cost, according to the engineers, of building over the Peace River pass, to use the P. G. E. to Vancouver for the assumed maximum traffic, is \$88,000,000—it is on page seven of the report—and for the assumed minimum traffic is \$27,000,000. Let us take this from the Canadian National point of view and the point of view of the country, in order to get an idea of the large picture, or take the Peace River valley traffic to the Pacific coast, via the P.G.E., thus satisfying on the one hand the desire of the Alberta government that the ownership of that railway should be assumed by the Dominion—you are desirous, of course, that the ownership of the P. G. E., should be assumed by the Dominion. I am trying to get before the committee a picture of what is involved in the way of total capital investment, and I want to know if I am overstating it when I say that for the initial traffic it would involve \$20,000,000 for the E. D. and B. C., at least \$27,000,000 to connect with the P.G. E., and \$30,000,000 for the P.G.E., plus whatever is required to finish the P.G.E. from Fort George in to Vancouver. Am I overstating it?—A. I do not think it would cost you \$27,000,000 to connect with the Edmonton and Dunvegan, or the P.G.E. at Prince George.

Q. That is what the engineers say.—A. I think that is rather an excessive estimate.

Q. But apart from that I have not overstated the position?—A. No, I would not say so.

By Mr. Anderson:

Q. In the interests of British Columbia, would you be prepared to suggest to your government the handing over of the P. G. E. to the Grand Trunk Pacific as a gift, against the bonded indebtedness to carry out something for advancing the development of British Columbia?—A. I may say that I am willing to bargain.

By Hon. Mr. Dunning:

Q. But without giving you anything, Mr. Oliver, for your accumulated deficits?—A. We do not expect anything.

Q. Without allowing anything for that, by these figures it would mean the whole route, including the cost of the E.D. and B.C. and the P.G.E., regardless of accumulated deficits, it would be in the neighbourhood of \$80,000,000?—A. I would not attempt to dispute those figures.

Q. With that one qualification, you say you think the engineers are high?—A. Are high as between those connections.

Q. I suppose your experience, Mr. Oliver, has not been that they have been too high in their estimate, has it?—A. (No audible answer).

The CHAIRMAN: Are there any further questions to be asked of Mr. Oliver by any member of the committee?

By Mr. Anderson:

Q. Have you anything further to say as to what position the Canadian Pacific and the Canadian National took?—A. I think the proper position for this committee is to let those parties speak for themselves.

Mr. BELL (St. Antoine): Mr. Oliver says he is willing to bargain with the Dominion, and I understand that the position of the province of Alberta, in regard to the Edmonton and Dunvegan, is that while they own the road, as stated by Mr. Oliver, they do not own the natural resources, and are not in a position to grant land. I assume Mr. Oliver has made it clear that he is willing, on behalf of British Columbia, to give certain lands for colonization purposes.

Mr. DUNNING: The figures I mentioned were, of course, subject to any reduction which either of the province might take from their total capital investment. In fact, I eliminated \$22,000,000 from British Columbia in the form of accumulated deficit before I quoted the figure of \$52,000,000, and also any deficit in Alberta when I quoted the figure of \$20,000,000.

Mr. SPENCER: I would like to ask Mr. Oliver why he included the Imperial Government in his remarks?

Hon. Mr. OLIVER: I included the Imperial Government because my understanding is that the Imperial Government is paying out many millions of pounds for unemployment relief, and it would be better for the nation if they had to work for it.

Mr. ANDERSON (High Park): Your idea of Imperial relief is in the way of immigration and colonization?

Hon. Mr. OLIVER: Surely.

Hon. Mr. DUNNING: Just one other point, Mr. Oliver. Have you given any thought to the statement by the engineers that even if any of these western outlets from the Peace River district were built it would be more economical from a railroad operating point of view to take the tonnage down the existing Canadian National line to Vancouver rather than via the P.G.E.?

Hon. Mr. OLIVER: There is no doubt that as between Red Pass Junction and Vancouver, the Canadian National line has got a better road and an easier grade than there is on the P.G.E.

The CHAIRMAN: The Hon. Mr. Sutherland of the Government of British Columbia is here this morning and perhaps he desires to make a statement.

Hon. Mr. SUTHERLAND: I think the Premier has covered the subject very well and I will not take up any more of your time.

F. H. KITTO called.

By Mr. Kennedy:

Q. Mr. Kitto, I wonder if you would mind explaining to the Committee what your position is in the Natural Resources Branch?—A. I hold the position in the Natural Resources Branch, the Intelligence Department, which is a branch of the Department of the Interior, of field engineer on investigations of natural resources in various parts of Canada as assigned from season to season.

Q. You are a Civil Engineer?—A. Yes, sir, a Dominion Land Surveyor.

Q. How long have you been with the Department of the Interior?—A. Nearly 20 years.

Q. What experience had you before that in engineering?—A. Surveying, in the Edmonton district.

Q. You were sent up to the Peace River on one or two occasions, or more?

—A. Six occasions.

Q. What years were you there?—A. 1916, 1917, 1919, 1920, 1921 and last fall.

Q. What was the purpose of your visits to the Peace River country on those occasions?—A. Principally to study the land situation.

[Hon. John Oliver.]

Q. Is that the agricultural land or a general survey?—A. Agricultural land.

Q. Your last visit was in 1926, was it not?—A. Yes.

Q. Have you made an estimate of the available agricultural land in the Peace River country?—A. Yes.

Q. Will you tell the Committee what your estimate is of the available acreage, and then we will ask you after that to give us a sort of general description of it?—A. 12,000,000 acres, including the Peace River block in British Columbia.

Q. I wonder if you would mind taking this map and showing just where that land is?—A. The first block is around Lesser Slave Lake, which is not strictly a part of the Peace River drainage basin but I included it because it is indigenous to the Peace River country. There are 325,000 acres there of agricultural land which could be economically developed in the very near future.

By Hon. Mr. Dunning:

Q. How far is it from the existing E. D. and B. C. Railway?—A. About a quarter of it is quite close, the remainder will be on the north side of the lake.

Q. How far is it from Edmonton?—A. About 200 miles.

Q. The traffic would naturally go westward, is that the idea?—A. I think it would go west.

By Mr. Donnelly:

Q. Where is that on the other map?—A. (Witness indicating).

Q. It is not within that red line at all?—A. Just adjacent to the red line.

By Hon. Mr. Dunning:

Q. It is not taken into account on the engineers' map?—A. Yes, sir.

Q. 325,000 of arable land?—A. Of arable land.

Q. Covered with bush?—A. Mostly bush land.

By Mr. Donnelly:

Q. What percentage is bush?—A. 85 per cent.

By Mr. Spencer:

Q. Would it be difficult to clear?—A. No, not extremely so.

By Hon. Mr. Dunning:

Q. What is it, willow and poplar?—A. And spruce.

Hon. Mr. DUNNING: I have cut some of that 85 per cent bush and it is not easy to clear.

By Mr. Spence (Maple Creek):

Q. What is the nature of the soil there; you say there is spruce growing, is it sandy?—A. Sandy and clayey.

By an Hon. Member:

Q. Is there any production there so that you could give us some idea of the production of that soil in cereals?—A. There is a little along the south of the lake and west of the lake.

Q. What is the average over a period of years?—A. I could not tell you that.

Hon. Mr. DUNNING: We would ask Mr. Gzowski at this point why the engineers did not consider that area.

Mr. GZOWSKI: Because the mileage that has been referred to would be shorter via Edmonton than via the Obed route, and consequently by any other route still shorter.

Hon. Mr. DUNNING: Your view is that in any case that traffic would go via Edmonton?

Mr. GZOWSKI: Yes, if it took the shortest mileage.

By Mr. Kennedy:

Q. All right, go on and give us your description.—A. Block No. 2, I took around High Prairie, 625,000 acres. Block No. 3, between Smoky River and Little Smoky River, 1,000,000. Block No. 4, around McLennan, 700,000 acres. Block No. 5, immediately east of the town of Peace River, 500,000 acres. Block No. 6, north of Peace River, from the Peace River down to the Alberta—British Columbia boundary, 1,875,000 acres. Block No. 7, the Spirit River country south of the river, 700,000 acres. Block No. 8, the Grande Prairie country, 1,475,000 acres. Block No. 9 is the Peace River block in British Columbia, 1,100,000 acres. Block No. 10, the Battle River country, 1,100,000 acres. Block No. 11, the Fort Vermilion district, 2,600,000 acres.

By Hon. Mr. Dunning:

Q. What is your total?—A. 12,000,000 acres.

Q. The engineers had 8,500,000 acres?—A. Yes.

Q. Where is the difference between their's and your's in addition to the 300,000 acres we have already discussed?—A. There is some difference in the central part of it. My figures are slightly larger than their's. A great deal of the difference is in the Fort Vermilion and Battle River country.

Q. That is not included by the engineers at all?—A. Yes, they include 1,300,000 acres where I include 3,700,000.

Hon. Mr. DUNNING: Why was that not included, Mr. Gzowski?

Mr. GZOWSKI: We had to limit our mileage somewhere, so we limited it to a strip 200 miles long and 20 miles wide in that northern part. If we went to the larger area now referred to we would have to build more railroad. We could not make any railway study without railway mileage; so that along with our area went our theoretical railway.

By Mr. Fraser:

Q. That acreage you have given does not include any land in British Columbia except within the block?—A. No.

Q. Have you any knowledge of what land there is in British Columbia outside of the Peace River block?—A. I have seen some south of the block and I have been through there from Fort George by the Crooked, Pack and Parsnip Rivers, and down through the mountains by the Peace River to the Peace River block.

Q. This Peace River block extends approximately 40 miles north of the Peace River; you have included that area?—A. Yes.

Q. You have no knowledge of your own, or any other knowledge of the area in British Columbia north of the Peace River block?—A. I have an estimate on it.

Q. Would you mind giving us that estimate?—A. North of the block, 250,000 acres.

By Hon. Mr. Dunning:

Q. What do you base that estimate on?—A. I base that estimate on information given to me by one of the surveyors of the Department of the Interior who has worked through that country, and to whom I have talked often.

[Mr. F. H. Kitto.]

By Mr. Spence (Maple Creek):

Q. Is it blocked off?—A. Not north of the block.

By Mr. Fraser:

Q. Do you include in that area where you have 250,000 acres all the land in the north-west corner of British Columbia, north and west of the boundary?—A. That includes only north of the block to the height of land.

Q. You do not cross the height of land at all?—A. No.

Q. But a much larger part of British Columbia is in that area?—A. East of the Mountains, yes.

By Hon. Mr. Dunning:

Q. What do you know about the country south of the Peace River block in British Columbia?—A. There is some good land south of the block.

Q. This is the land Mr. Oliver was going to give away and I want to know what it is like; he might be giving it to me.—A. From my studies I put that at 112,500 acres, plus some good land that was inaccessible, an isolated prairie, 15,000 acres.

By Mr. Kennedy:

Q. From a personal examination of the country your contention is that there are about 12,000,000 acres that we can reasonably expect the development of?—A. Yes.

Q. In addition to that there is a large tract of territory lying between North St. John and Hudson Hope that has not yet been examined by you personally?—A. Yes.

Q. Have you had any discussion with trappers or others who were through that country that would lead you to think that there might be a lot of good land in that district?—A. Yes. Sufficient interest was raised that it was the intention of the Department to have sent me in there last year but we were delayed in getting our field work started until it was too late.

Q. With regard to the discrepancy between your figures and the figures of the engineers, the engineers, I suppose, took their figures from maps that were not as up-to-date as your examination was last year. Is it your experience that sometimes a fire in the timber will make prairie land of what was previously bush land?—A. Yes.

Q. And is there not a possibility that the discrepancy in the central block is due to that fact?—A. Yes, there is.

By Hon. Mr. Dunning:

Q. But the routes are still there?—A. Yes, and they will be there for some time.

By Mr. Kennedy:

Q. You have a pretty good knowledge of the province of Alberta as a whole, Mr. Kitto?—A. Yes, I think so.

Q. Southern, Central and Northern Alberta?—A. Yes.

Q. How do you think the soil in the Peace River country compares with the average throughout the rest of the province of Alberta?—A. It is better than the south and equal to the more northerly part.

Q. How does the percentage of surface that is fit for agriculture compare? Do you think there is less or more stone or sand hills or gravel ridges in the Peace River, from your examination of it, than there is on an average throughout the rest of the province?—A. Probably less surface stones and sand hills.

Q. Have you made any examination of the crop yields in the Peace River country?—A. Yes.

Q. How do the average yields in the Peace River country compare with the rest of the province of Alberta?—A. Favourably with the rest.

Q. How do they compare with the yields throughout Saskatchewan and Manitoba?—A. They are higher than the average of the whole.

Q. If a certain development should take place within a certain time in the province of Alberta, taking the whole of the province, would it be too much to expect the same rate of progress over a period of years in the Peace River country as we have had in the rest of the province?—A. I think not.

Q. Is the Peace River country harder to develop than the average of the rest of the province, provided you had the same facilities and the same conditions?—A. If you had the same transportation facilities it would be no harder.

By Mr. Spence (Maple Creek):

Q. What about the 80 per cent bush?—A. Well, that 80 per cent referred to the first area I mentioned. Some of the other areas will reduce to 50 per cent.

By Hon. Mr. Dunning:

Q. Give us the proportion on the different areas?—A. The first area, 85 per cent; High Prairie, 75 per cent; No. 3, 75 per cent; McLennan, 80 per cent; east of Peace River, 80 per cent; this large area (indicating), 50 per cent; No. 7, 60 per cent; Grande Prairie, 50 per cent; this block area (indicating), 50 per cent; Battle Creek, possibly 90 per cent, though I am not sure of that; and Fort Vermilion, 60 per cent.

By Mr. Donnelly:

Q. It will be an average of 70 per cent all round?—A. Nearly, including the lighter timber and brush as well as the heavier.

Q. What percentage of the block, ignoring the Peace River for the meantime; how much clear land or part clear is there inside that block, including the Peace River block and coming east as far as McLennan; what would be your estimate of the clear land?

Hon. Mr. DUNNING: That is a pretty hard question.

By Mr. Kennedy:

Q. Taking your own figures of 12,000,000 acres, I think it works out at an average of about 40 per cent clear land; my idea is that most of it is in that area?—A. (No answer).

By Mr. Spence (Maple Creek):

Q. Does that brown colouring there denote the surveyed lands?—A. Surveyed lands not taken up.

By Mr. Kennedy:

Q. Have you the figures of the total land that is taken up?—A. I have not them with me.

By Mr. Donnelly:

Q. All the best land has been taken up at the present time?—A. Yes, except in the north.

Q. What is left is chiefly the bush?—A. Except in the Fort Vermilion district.

By Mr. Kennedy:

Q. How much is taken up, do you remember?—A. In the Fort Vermilion district?

Q. No, in the whole country?—A. I do not remember that, Mr. Kennedy.

[Mr. F. H. Kitto.]

By Mr. Spencer:

Q. How far have they settled back from the railway?—A. In the Peace River block they have settled 80 miles from the railway.

By Hon. Mr. Dunning:

Q. Along the river?—A. Back from the river, 15 or 20 miles back.

Q. Do they use the river for transportation?—A. Very little.

Q. Is it trail transportation to the nearest railroad point?—A. Yes, sir.

By Mr. Kennedy:

Q. Could you prepare a statement, Mr. Kitto, showing the land that is disposed of?—A. Yes, I have one prepared up to the first of January of this year and I can have it sent up this afternoon, or any time that is convenient.

Q. From your examination of the country what percentage of the land taken up is cleared?—A. Well, roughly speaking—

Hon. Mr. DUNNING: You mean all cleared?

By Mr. Kennedy:

Q. What is the amount of land where a man can go right on and make a living with his outfit?—A. That would be only a guess, I could not give it to you definitely.

Witness retired.

Mr. FRASER: I have no questions to ask Mr. Kitto but I would like to make a statement with regard to the area that I was speaking of a moment ago in order to indicate in a general way the area of land that there is in that north-east corner of British Columbia. It is outside of the Peace River block in the province starting north of the river. There are 3,500,000 acres included in the block now outside of that block (indicating), and in the north-east corner of the province there are about 18,000,000 acres.

Hon. Mr. DUNNING: What kind of land?

Mr. FRASER: I am not classifying it. I am only giving an idea of the extent of the country. Around the Peace River watershed there are about 3,000,000 acres.

Hon. Mr. DUNNING: What about the Mountains?

Mr. FRASER: The divide is very low all through that country, not much above the general average of the surrounding country. I am taking these figures from the report of the Minister of Lands of British Columbia for the year 1914.

Hon. Mr. DUNNING: You would need more railway than is now proposed in order to reach it?

Mr. FRASER: Exactly.

The Committee adjourned until Wednesday, the 30th instant, at 11 o'clock a.m.

STATEMENT SUBMITTED BY MR. F. H. KITTO, NATURAL
RESOURCES BRANCH, DEPARTMENT OF THE INTERIOR,
OTTAWA, ONT.

PEACE RIVER COUNTRY—LAND SITUATION.

(As at January 1, 1927.)

DETAILED STATEMENT OF SURVEYED AREAS IN THE PEACE RIVER AND GRANDE PRAIRIE LAND DISTRICTS.

(*Dominion Lands in Alberta and Peace River Block of British Columbia.*)

Particulars	Land Agency		Total
	Peace River	Grande Prairie	
	Acres	Acres	Acres
Area surveyed in sections.....	7,002,000	3,700,600	10,702,600
Area finally disposed of.....	495,000	743,000	1,238,000
Area entered for but not patented; also lands reserved for different purposes.....	492,000	306,600	798,600
Area under grazing leases.....	84,200	87,700	171,900
Area under timber berths.....	197,400	153,600	351,000
Area available for homestead entry.....	5,336,000	1,945,000	7,281,000
*Area under petroleum, gas and coal mining.....	76,500	4,200	80,700

*Petroleum, gas and coal mining leases do not hold the land against entry.

SESSION 1926-27
HOUSE OF COMMONS

SELECT STANDING COMMITTEE ON

RAILWAYS, CANALS AND TELEGRAPH LINES

Various Proposed Railway Routes for a Western
Outlet to the Pacific from the
Peace River District

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 4—WEDNESDAY, MARCH 30, 1927

WITNESSES:

Mr. C. S. Gzowski, Chief Engineer, Construction Department, Can. Nat. Rys.
Mr. J. G. Sullivan, Consulting Engineer, Canadian Pacific Railway Co'y.

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1927

ORDER OF REFERENCE

WEDNESDAY, March 30, 1927.

Ordered, That an additional 100 copies in English of evidence they have taken, and of evidence which may still be taken by the said Committee respecting the Peace River District proposed railway routes to the Pacific, be printed for the use of the Committee, provided the type is standing.

Attest.

ARTHUR BEAUCHESNE,
Clerk of the House.

WEDNESDAY, March 30, 1927.

Ordered, That the said Committee be given leave to sit while the House is sitting.

Attest.

ARTHUR BEAUCHESNE,
Clerk of the House.

MINUTES OF PROCEEDINGS

WEDNESDAY, March 30, 1927.

The Committee met at 11.00 a.m., Mr. Young (Saskatoon), Acting Chairman, presiding.

Present: Messrs. Anderson (Toronto-High Park), Bell (St. Antoine), Bell (St. John-Albert), Blatchford, Bradette, Campbell, Cantley, Charters, Cotnam, Denis (Joliette), Denis (St. Denis), Donnelly, Dunning, Dussault, Edwards (Waterloo South), Evans, Fansher (Lambton East), Fansher (Last Mountain), Fraser, Gardiner, Girouard, Goodison, Heaps, Howden, Jelliff, Kennedy, Laflamme, Lanctot, Lapierre, Lovie, Lucas, McKenzie, McLean (Melfort), McPhee, Manion, Mercier (St. Henri), Milne, Ross (Moose Jaw), Simpson, Smith (Cumberland), Spencer, Stewart (Leeds), Stirling, Taylor, Totzke, Vallance, Ward, Young (Saskatoon), Young (Weyburn), Young (Toronto Northeast)—50.

Bill No. 120, An Act respecting Joliette and Northern Railway Company.

Ordered,—To report without amendment.

PEACE RIVER DISTRICT PROPOSED RAILWAY OUTLETS TO THE PACIFIC

The Chairman read a telegram from Premier Brownlee of Alberta, addressed to Mr. Kennedy, requesting an opportunity to be heard by the Committee. It was the opinion of the Committee that, if it can be arranged, Premier Brownlee should be heard.

On motion of Mr. Kennedy,—

Resolved,—That permission be asked to have printed an additional 100 copies in English, for the use of the Committee, of evidence taken, providing the type is standing, and of evidence which may be taken.

Mr. C. S. Gzowski was recalled and further examined. In the course of the examination Mr. Kennedy moved that Mr. Callaghan, General Manager and Deputy Minister of the Railways owned by the Alberta Government, be called.

A division being taken on the motion, it was resolved in the affirmative, as follows:—

Yea: Messrs. Bell (St. Antoine), Campbell, Cantley, Charters, Cotnam, Denis (Joliette), Dunning, Evans, Fansher (Last Mountain), Fraser, Gardiner, Goodison, Heaps, Jelliff, Kennedy, Lovie, Lucas, Macdonald (Kings), Mercier (St. Henri), Milne, Price, Rennie, Smith (Cumberland), Spencer, Stirling, Totzke, Vallance, Young (Toronto Northeast)—28.

Nay: Messrs. Anderson (Toronto-High Park), Bell (St. John-Albert), Bradette, Donnelly, Girouard, Howden, Lanctot, Lapierre, McKenzie, McLean (Melfort), Taylor, Young (Weyburn)—12.

Witness retired.

Mr. J. G. SULLIVAN was recalled and further examined.
Witness retired.

On motion of Mr. McLean (Melfort),—

Resolved,—That permission be asked to sit while the House is sitting.

On motion of Mr. Heaps,—

Resolved,—That the Committee now adjourn until to-morrow at 11 a.m.

The Committee adjourned at 1.10 p.m. until to-morrow at 11 a.m.

MINUTES OF EVIDENCE

COMMITTEE ROOM 231,
HOUSE OF COMMONS,
WEDNESDAY, March 30, 1927.

The Select Standing Committee on Railways, Canals and Telegraph Lines met at 11 a.m., the Acting Chairman, Mr. Young (Saskatoon) presiding.

C. S. Gzowski, re-called.

By Mr. Kennedy:

Q. I am reading from page 9 of the Report, that part dealing with traffic. It says, "In estimating freight traffic, it is only safe to figure on farm products for out-going and farm requirements for incoming traffic."—A. Yes.

Q. I have here a tabulated statement by the Bureau of Statistics showing the total revenue tonnage on the E. D. and B. C. Railway and the Central Canada Railway. It shows that the total revenue tonnage on the E. D. and B. C. Railway in 1917 was 170,000 tons; in 1925, 282,000 tons. These are only the round figures. It shows for the Central Canada, which of course was merged with the E. D. and B. C., in 1917, 8,000 tons and 1925, 32,000 tons. I would like to have this statement in the record.—A. Mr. Kennedy, are those the same as in the Blue Book?

Q. These are the railroad statistics, I understand, that are furnished by the Bureau of Statistics; the records are furnished to the Bureau of Statistics by the railroad. Why is it, Mr. Gzowski, that in estimating the tonnage you state it is only safe to figure on farm products? You estimate the average farm products for a period of years at 35,000 tons, and you ignore all the rest of the revenue tonnage?—A. Not altogether, no; we added 15 per cent.

Q. Well, what did you add?—A. 15 per cent. We really computed the farm products in the heaviest commodity, which was wheat, and then we added 15 per cent.

By Hon. Mr. Dunning:

Q. For the other commodities?—A. Yes.

By Mr. Kennedy:

Q. Is it your contention then, that if you have 35,000 tons as an average for farm products, and you cut it right down to wheat alone in the last analysis, the 15 per cent accounts for the additional revenue tons?—A. I do not quite understand the question.

Q. If you will look at page 10 of the Report, the average tonnage for the period 1919-23 works out at 48,000 tons, though you figure later on that the initial or present traffic is 35,000?—A. Yes.

Q. We have in the year 1919 a total revenue ton mileage of 299,000 tons; in 1920, 177,000 tons—these are the round figures—in 1921, 116,000 tons; in 1922, 181,000 tons; and in 1923, 222,000 tons. If you have an average of approximately 48,000 tons for the revenue tons of grain, do you think that the insignificant estimate of 15 per cent for other tonnage, developed as a result of the grain business in the Peace River country, will account for the extra tonnage average of around 175,000 tons?—A. We are not talking about the same thing at all.

Q. Will you please explain?—A. The tonnage that we took was the tonnage we assumed would move over this new railroad outlet. The tonnage you are

[Mr. C. S. Gzowski.]

talking about is the total tonnage of the Edmonton and Dunvegan Railway and it includes local traffic and everything else. It has no relationship, so far as I can see, with the amount of tonnage that would move to the Pacific coast.

Q. The tonnage that you presumed would move out to the Pacific coast was based on the records of production of the Peace River country, as shown by the tonnage moving over the E. D. and B. C. Railroad over the period of years from 1919 to 1923?—A. That includes the local tonnage moving back and forth. You will find that the average haul on the Edmonton and Dunvegan is 139 miles which indicates very plainly that there is a lot of local traffic moving between points, and that means that the tonnage is probably counted twice in the figures you have there, if they are the railroad statistical figures, as I understand they are.

Q. You show in this statement that there were 48,934 tons of grain, on an average, moved over the E. D. and B. C. Railway?—A. No, not moved over the E. D. and B. C.

Q. If, as a result of the development over that railroad, there has been an additional tonnage of over 200,000 tons per annum, is it not reasonable to expect that you will get a similar development in other tonnage?—A. You would have a certain local tonnage, I suppose, but we were making the report on the basis of the amount that would go over the outlet link, not the local development.

Q. Your whole argument is an analogy with respect to the tonnage moving over the E. D. and B. C.?—A. No, because you interject a new railroad into this proposition as soon as you talk about a western outlet.

Q. How much of the total revenue tonnage moving over the E. D. and B. C. do you think is accounted for by the Peace River country, that is, north of the Athabasca River?—A. How much is accounted for by the Peace River district?

Q. Yes.—A. I do not just understand that question.

Q. Take the total revenue tonnage on the E. D. and B. C.; what percentage of it goes into or out of the Peace River country from the Athabasca River north?—A. Well, in the first place, where is the boundary of the Peace River country?

Q. Well, I think the boundary for the Peace River country is north of the Athabasca River?—A. I mean east and west. Do you speak of the Peace River country as the area draining into the Peace River; in other words, are you speaking of the splitting point as west of Lesser Slave Lake?

Q. Well, as a matter of fact, I do not think it would make much difference. I was speaking of the Peace River country from the Athabasca River west; the real producing territory is from the Lesser Slave Lake west and is included in the blocks we have made there on that territory?—A. I do not know how much was contributed by that area.

Q. Are any of the other engineers prepared to make an estimate of it?—A. I should not think so, but I would not be prepared to say.

Q. There are three of them here and I would like to know how many of them could. My estimate is about three-quarters of it because of the fact that south of Smith you have the competition of the Canadian National Railways running to Athabasca and the area of land tributary to the E. D. and B. C. is just about the same, according to the estimates made by Mr. Groff of the Publicity Commission of the province of Alberta, and then that district is divided by the Canadian National Railway.

Hon. Mr. DUNNING: It was understood, when this evidence was ordered to be printed, that the object was to get information from the engineers and that the questions and answers would be printed. Mr. Kennedy is embarking on a lengthy argument, winding up sometimes with a question and sometimes not, and, though I want to see him treated with the utmost courtesy, I think

he is going beyond what the Committee understood to be the nature of this examination.

Mr. KENNEDY: I do not know what the Committee understood to be the nature of it, Mr. Minister, but if the Committee upholds you, that will be all right.

Hon. Mr. DUNNING: It is not a question of what I understand, but it is a question of what this Committee undertook should be done when these witnesses were summoned, and it is a matter of record as to what was understood should be printed; that is, the questions addressed to the witnesses and their answers would be a matter of record for the information of the Committee.

The CHAIRMAN: I think we would get along better if you would merely ask the question that you want answered and let the witness answer it, and then when you are addressing the Committee, if you so desire, you could make any argument you like.

By Mr. Kennedy:

Q. I understand that you have been in correspondence with Mr. Callaghan, the Deputy Minister of Railways, with regard to this?—A. I wrote him and asked him for certain information with reference to the quantities of grain.

Q. I presume your reason for doing that was because you were aware Mr. Callaghan was familiar with the Peace River district?—A. He is in charge of the railways, so I asked him for statistical figures. I asked him for the quantity of grain shipped during 1924, 1925, and 1926, if possible divided east and west of Smith. I asked him if there was, in his opinion, any other products that were handled on the railroad that would move to the western outlet, and that he give it separately.

Q. Your purpose in doing so was to check your own estimate?—A. It was after reading Hansard where there was a certain statement made, I think by yourself, comparing the gross tonnages, such as you have been using now, on the Edmonton and Dunvegan, and intimating that the tonnage we took was too small. I wanted to know what the latest figures on the grain were.

Q. Would you mind giving us Mr. Callaghan's estimate?—A. No.

Mr. DENIS (Joliette): I think the proper way of putting this on record would be to call Mr. Callaghan himself, unless it is purely and simply a written statement that it is to be placed on record.

Mr. GZOWSKI: There are two rather long statements here; the first is in reference to the number of bushels of all grains shipped from stations on the Edmonton and Smith division of the E.D. and B.C. Railways, for the periods as indicated. The periods are August 1, 1926, to February 28, 1927; August 1, 1925, to July 31, 1926; in other words, the crop year. There is also given the crop year for 1924-25 and for 1923-24, and given for wheat, oats, barley, rye, and flax. I suppose I had better give you all the figures.

	Bushels.
Wheat..	777,274
Oats..	50,936
Barley..	20,116
Rye and Flax..	Nil
 Total..	 848,326
For the Crop Year 1925-26:	Bushels.
Wheat..	907,840
Oats..	514,685
Barley..	224,040
Flax and Rye..	Nil
 Total..	 1,646,565

[Mr. C. S. Gzowski.]

For the Crop Year 1924-25:

	Bushels.
Wheat	620,873
Oats	620,248
Barley	221,459
Rye and Flax	Nil
Total	1,462,580

For the Crop Year 1923-24:

	Bushels.
Wheat	774,415
Oats	664,476
Barley	207,784
Rye and Flax	1,180
Total	1,647,855

Grand Total for the four years:

	Bushels.
Wheat	3,080,402
Oats	1,850,345
Barley	673,399
Rye and Flax	1,180
Grand Total	5,605,326

The next statement shows the number of bushels of all grains shipped from stations north on the E.D. and B.C. and the C.C. Railway, for the periods as indicated. This statement is also divided for the four crop years.

For the Crop Year 1926-27:

	Bushels
Wheat	2,671,500
Oats	718,513
Barley	1,296
Rye and Flax	20,915
Total	3,412,224

For the Crop Year 1925-26:

	Bushels.
Wheat	1,418,274
Oats	344,026
Barley	10,870
Rye and Flax	7,152
Total	1,780,322

For the Crop year 1924-25:

	Bushels.
Wheat	940,124
Oats	426,412
Barley	23,877
Rye and Flax	29,070
Total	1,419,483

[Mr. C. S. Gzowski.]

For the Crop Year 1923-24:

	Bushels.
Wheat..	1,986,001
Oats..	1,163,710
Barley..	23,316
Rye and Flax..	7,416
 Total..	 3,180,443

Grand Total for the four years:

	Bushels.
Wheat..	7,015,899
Oats..	2,652,651
Barley..	59,359
Rye and Flax..	64,553
 Grand Total..	 9,792,472

By Mr. Jelliff:

Q. Can the witness give us the source from which these figures were derived?—A. From Mr. Callaghan, who is the General Manager and the Deputy Minister of the railways owned by the Alberta Government.

By Hon. Mr. Dunning:

Q. Are these the figures for the whole line or are they the figures which Mr. Callaghan estimates would go west over this cut-off?—A. I asked for the figures of the grains and he says here, "All the grain moved on these two railroads, divided east and west by Smith". I might say that Smith is a divisional point and I presumed it might be possible to get a division there because the books might have been kept in that way. Apparently they were, because he did divide them for us.

By Mr. Donnelly:

Q. Would you mind showing us on the map where this place Smith is?—A. It is just about the bend in the Edmonton-Dunvegan Railway (indicating on map.) It was selected because it is a divisional point; at least, I selected it in asking Mr. Callaghan for these figures.

By Hon. Mr. Dunning:

Q. Would grain produced as far east as Smith go out the western route?—A. No, but the little that would be produced west of there is relatively small.

Q. Immediately west?—A. Immediately west, until you get some distance. If you divided it at the proper dividing point the change would be relatively small.

By Mr. Jelliff:

Q. Can the witness tell us how large an area these figures cover, how many miles?—A. Well, it will be roughly. To Smith, the first divisional point is in the neighbourhood of 135 or 140 miles. The first figures I gave came from that 135 miles. The second lot of figures came from the balance of the railroad, but I cannot recall the total mileage of the E.D. and B.C. and Central Canada altogether.

By Mr. Kennedy:

Q. Would you mind filing that?—A. The letter or the statement?

[Mr. C. S. Gzowski.]

Q. I will take the whole letter, statement and all, because the letter goes into the very things which you go into in this report?—A. I have no objection to filing the letter particularly.

Q. Would you mind filing it?—A. No, I do not mind filing it. It was a letter written to me answering a wire I sent to Mr. Callaghan, and personally I have no objection to filing it.

Discussion followed.

By Mr. Jelliff:

Q. Your report is based, so far as crops are concerned, on this document you have been reading from?—A. No, sir. What I have been reading from is something that came to me in a letter dated March 16, 1927, as a result of a wire I sent to Mr. Callaghan asking him for those figures. They are all subsequent to the report; the report was two years old. We were curious, after reading Hansard, to obtain for our own information the figures on the progress that had been made in the production of crops in that district during the two years since the report had been written.

Q. Did the figures you have given enter in any way into your opinion expressed in your report? A. No; we did not have them until two years after the report was written.

Hon. Mr. DUNNING: I have not any objection to the filing of figures, which are simply matters of fact, but if, in response to the request for figures, an argument was also set forward, I submit that the witness should be here and be examined on the argument or evidence which he attempts to give.

Mr. GZOWSKI: I might say that there are arguments and opinions expressed in Mr. Callaghan's letter which I did not ask for at all. I asked him for figures on the traffic actually moving that would move over the western outlet. He used the opportunity to make some arguments, and, as a matter of fact, he made an estimate of what he figured would be the tonnage moving after a few years if the western outlet was built. That was volunteered; I did not ask for it. I do not think it contradicts particularly what we have got, it is certainly very much less than our maximum tonnage.

The CHAIRMAN: It seems to me that what we are doing now is examining Mr. Callaghan through Mr. Gzowski. I do not see how we can do that. Mr. Gzowski is being examined on this report and what he knows about this, and I do not see how we can go into a matter of this kind, such as examining Mr. Callaghan through Mr. Gzowski.

Discussion followed.

By Mr. Kennedy:

Q. On the same page you say "Lumber produced in the east will not be shipped to the Pacific coast, so that traffic may be eliminated from that study"?—A. Yes.

Q. In the report you state there is a limit on the Monkman route and also on the Obed route. I think Mr. Hill will confirm that.—A. Yes, Mr. Hill will be better able to speak on anything outside of that.

Q. Why would you eliminate lumber from consideration of tonnage if it is going to be shipped back over a portion of the railway into the prairies?—A. It would not go over any part we are considering; any new construction—it would go over the present railroad, of course.

Q. The timber on the Monkman route: you mean to say that will not go over any part of that route, if it were built?—A. It would not go out over the Monkman pass.

[Mr. C. S. Gzowski.]

Q. Will the lumber at Sturgeon Lake go over that route?—A. Not the Obed route.

Q. Where would the lumber from Sturgeon Lake go?—A. Go east.

Q. And you say it would not go over any part of the recommended route?—A. If some originated in the middle of the route it would go back to where it connected with the present—yes, there might be some. What we meant was there would be no outbound shipments to the Pacific coast on lumber.

Q. If that timber were shipped back to the prairies it would go over the E.D. and B.C.?—A. I think so, yes.

Q. That lumber would not be altogether killing the E.D. and B.C.?—A. I don't think it would affect the lumber movements at all.

Q. This may be possibly a leading question, and not directly on the subject, but if you had a sharp reduction in freight rates on the railways of Canada, approximating thirty per cent in one year, would you estimate that that would be considered in your average of five years so far as the railway was concerned—if it came to the question of earnings or development or anything else?—A. Are you asking about any five years in that picture, or some specific five years?

Q. I would like you to look at the prices and price index by the Bureau of Statistics for the years 1919 to 1924, and notice the sharp reduction in wheat prices between 1920 and 1921.—A. Did you say I should notice the reductions of 1920 and 1921?

Q. Between 1920 and 1921? The average prices for wheat—it is marked in red; Number One Northern is the basis Fort William and Port Arthur.—A. In 1920 it was \$2.51.

Q. What was the average in 1921?—A. \$1.65 or \$1.64.

Q. A drop of about ninety cents—almost thirty or thirty-five per cent. Now, will you notice if it is not a fact that the five years' average you have taken here in the Peace River country includes that year?—A. We took the preceding five years from the year we made the report, whatever it was; whether in it fell good years or bad years.

Q. Would that drop in wheat have any bearing at all upon the production of the Peace River country in those five years?—A. I think a serious drop in the price of wheat would have an effect on the tonnage.

Q. In that case, do you still think the years you have taken as your index indicate the general development which might be expected in the Peace River country over a period of years?—A. We did not use them excepting to set them up and see whether we would start by making an economic study of the then existing traffic. We did that, but we found it was so small—the figures showed it to be so small—that we knew it could not possibly come out. We then proceeded to set up a minimum traffic which was considerably greater than the average during those years. We were getting the facts when we set that table up.

Q. In your statement you say: "The grain shipped from the Peace River district"—you find the average tonnage is 48,934, and then you state that the present tonnage is 35,000. Just why do you take that 35,000 as being the present tonnage?—A. It was a round figure based on about the average of the wheat, assuming that very little oats, very little barley, very little rye, and flax, would move to the Pacific coast, because we presumed that anything moving to the Pacific Coast was usually for export.

Q. Is it not a fair assumption, Mr. Gzowski, that if shipping from the Peace River country 48,934 average tons of grain, you get a total revenue tonnage of approximately 200,000?—A. I do not think there is any relationship—

Q. Do you think it would be a corresponding additional tonnage if you shipped 35,000 tons to the Pacific Coast?—A. No, I do not, because you simply interject another railroad into the same district for a very specific purpose.

Q. Is it your contention that the Pacific coast route outlet would not be development work?—A. Oh, it would in part; depending upon which road you are referring to. On parts of it it would be a development railway. We put in certain mileage while studying it; we had to put in some railway mileage to railroad it. The main point at issue was the outlet.

Q. You have a statement showing the total exports in thousands of tons from Canada, of wheat and flour to all countries, and also the exports of oats and so on. Have you taken into consideration the ease with which you can change from one thing to another—oat tonnage into wheat tonnage?—A. You mean change the crops?

Q. Yes. My point is that if they are raising oats in the country, and they find they cannot export oats, with the same ground and under the same conditions, would you not agree that they could raise wheat?—A. Yes. We practically did assume that it would be wheat when we calculated our maximum tonnage; we based it on wheat with enough other area for pasturage, summer fallow, and so on, and took an average better than the rest of the prairies.

Q. You say: "It would appear more or less absurd to make an economic study with the amount of traffic in sight at the present time. We have therefore, for our studies, assumed an initial outgoing traffic to the Pacific seaboard about five times as large as that indicated in the previous table." As a matter of fact, is it not true that you have not assumed an initial tonnage of five times?—A. It is not actual. We said "about five times." We figured we would use that as initial traffic, but when we arrived at the figures, we found it was about five times the present traffic and said so; it is a round figure—it is not precise.

Q. Does not your report say this: "We assumed an initial traffic of 175,000 tons". That is five times the present tonnage. As a matter of fact, it is just about what the present tonnage is?—A. No; not the tonnage we are talking about in that report. We are talking about the tonnage which goes over the western outlet; we are not talking about the tonnage over the Edmonton and Dunvegan Railroad—local tonnage.

Q. Why not?—A. It would not go over that route.

Q. You base it on the E., D. and B.C.—the tonnage moving over it—that is the sole basis of your calculation?—A. No, it is not at all. We first set up the present tonnage we figured would move on that outlet, and considered it was absurd to make a calculation on that, because it could not possibly work out with the capital invested, so there was no good starting there, and we took a very much larger figure and called it our initial traffic. We do not even pretend to predict how long it would take to come from the present traffic to the initial; two years have gone by since that report, and it has not come anywhere near the initial traffic as yet.

Q. On page fourteen of this typed copy, following right along after your other statement, it says: "then assuming that all the first-class and second-class land would be fully developed in twenty-five years, we have applied factors of average production larger than any that experience in any other district in the prairies would justify, added 15 per cent for by-products, etc., and arrived at a figure of 1,860,000 tons as the maximum that would be produced, which would go to the Pacific seaboard." I think in your evidence the other day you stated that the mileage of land on the prairies for each mile of railway was 5,200 acres, and the average in the Peace river, according to the plans you have laid out for this railroad, provided it were built at maximum mileage, was six thousand and something.—A. That is, acreage per mile, acres of economic land per mile of railway, and I explained that in the prairie there would be considerably more duplication of mileage or parallelism than probably in the Peace river.

Q. You think from experience of the past twenty years, we could avoid duplication in the Peace river?—A. Yes, I pointed that out.

[Mr. C. S. Gzowski.]

Q. If the line were wisely laid out, do you think it would be unreasonable to expect a greater tonnage per mile than that which we have on the prairies, with the duplication existing?—A. Yes, I think there would be a little difference.

Q. What do you mean by the development of a first- and second-class line? Is that the 8,500,000 acres?—A. Yes, that was that 8,500,000 acres.

Q. Have you compared the development in acreage for the period of twenty-five years in the province of Alberta with the Peace river?—A. The development per acre.

Q. Possibly my question is not very clear. Do you think the experience of the last twenty-five years in the province of Alberta would make it unreasonable to expect a development of that 8,000,000 acres in less than twenty-five years?—A. Well, I do not know that the development in Alberta would help you a great deal in your consideration; certainly not the southern part of Alberta; possibly the north, yes, because the character of land in the southern part of Alberta is more largely open; there was more prairie land and everyone knows that prairie land develops more quickly than land covered with timber, and there is a higher percentage of that in the Peace river. No matter what boundary you use, there is more land covered with timber which would require clearing, and for that reason I do not think you could make a comparison for the whole of Alberta.

Q. Is that true of central Alberta?—A. To a large extent, the way it is railroaded. If you go to the boundary of British Columbia, that might not be true, but that is not developed, and probably will not be in the near future.

Q. Is that true north of Edmonton?—A. Not north of Edmonton, no.

Q. Can you tell us what the acreage was in Alberta in 1905 under crop?—A. No, I have not got that, but it can be obtained from the Year Book.

Q. I was going to ask you to look at this (indicating) but I suppose the committee would want to summon the man who prepared the document—

Hon. Mr. DUNNING: Not if it is statistical. I do not suppose there is any argument on it; it is a question of fact. Of course, a witness can give his opinion on any question of fact.

By Mr. Kennedy:

Q. I show you page five of the Alberta report, and I would like to call your attention to the years 1906 and 1911—the production of wheat and oats for those years.—A. That is, the whole of Alberta?

Q. Yes. What I am after, Mr. Gzowski—you will see there that the wheat production jumped from 9,532,269 bushels in 1906 to 36,602,000 bushels in 1911, and the oats production jumped from 24,027,017 bushels in 1906 to 59,034,000 bushels in 1911, the total being produced on 1,639,974 acres of wheat and 1,122,217 acres of oats—about two and one-half million acres. My question is if in the province of Alberta in five years we had in 1906 223,930 acres under crop of wheat and 1,639,974 acres in 1911, and 476,511 acres of oats in 1906 and 1,122,217 acres of oats in 1911, is that not a much more rapid development than you would estimate might take place in the Peace River country in twenty-five years?—A. I should think it was more rapid.

Q. Based on the experience of Alberta?—A. The whole of Alberta, yes.

Q. Your development of the Peace River country—A. Would not be as rapid, and for that reason which I gave, mainly, that it is a more heavily timbered country.

By Hon. Mr. Dunning:

Q. Mr. Gzowski, on that point; is there any reason why you should expect as rapid a development in the Peace River as took place between 1906 and 1911 in the whole of Alberta, rather than the development which took place between

1911 and 1917 in the whole of Alberta? That is, is one any more reliable than the other as an index for the Peace River?—A. Yes, I should think so. I think the latter period would be more true in that the prairie land naturally is taken up first. In 1906, for a few years the prairie land would be very rapidly developed, whereas if you take the latter period that Mr. Dunning suggests, 1911, it would slow up as they began to go into the bush country.

Q. According to this, the course from 1922 to 1924 was downward, that is to say, 5,765,000 acres of wheat in the whole of Alberta and 5,573,000 acres. Would it be fair to say that because the whole of Alberta reduced its wheat acreage between 1922 and 1924 you might expect a reduction in the Peace River?—A. No, it would not be fair.

Mr. JELLIFF: Perhaps Mr. Kennedy will give us the production of wheat in Alberta for 1925-26.

Hon. Mr. DUNNING: I simply added another question for the purpose of demonstrating that it has very little bearing upon the matter that we are discussing.

By Mr. Kennedy:

Q. From 1911 to 1917 was there anything to interfere with the development of the Peace River country?—A. Yes, the war.

By Hon. Mr. Dunning:

Q. In the same period the whole of Alberta increased from 1,639,000 acres of wheat to 2,897,000, during the war?—A. I suppose they got a better start on the prairies and could stand the unusual conditions.

By Mr. Spencer:

Q. During these years, 1911 to 1917, were not the freight rates a good deal higher than they are to-day, and therefore the production would be affected?—A. They were higher to a very much later period than 1917.

By Hon. Mr. Dunning:

Q. Were they not higher, during that same period, in the whole of Alberta?—A. Yes, they were higher.

By Mr. Spencer:

Q. How does that compare with the rest of Alberta?—A. That, I cannot answer.

By Mr. Mercier (St. Henri):

Q. What is the population along that line?—A. I understand it is about 20,000 people.

By Mr. Spencer:

Q. Can you give an estimate of how many people have left that country through lack of railway facilities?—A. No.

By Mr. Kennedy:

Q. Where do you get your figure of from \$25 to \$30 per acre for clearing?—A. I do not know where we got it unless we got it out of our heads, based on our experience.

Q. How much of the 8,500,000 acres in the Peace River country requires this clearing?—A. That is an average price. There is some land in there that could not be cleared for \$30 an acre.

Q. How much of the land in the Peace River district, that is settled to-day, do you estimate is any harder to develop than the prairie provinces; that is, taking the bush into consideration?—A. I could not give a definite estimate of

[Mr. C. S. Gzowski.]

the quantity, that is, the percentage of it, but I would say that there was a very high percentage of it that would be more difficult to clear than the average clearing that is being done on the prairie.

Q. You do not know?—A. The percentage?

Q. Yes.—A. Well, there is no definite line to draw in clearing, as far as that goes; you could have as many different characters of clearing as you could have different characters of material to move from a cutting.

Q. Let us get at it this way: 75 per cent of this district is covered with light timber. Is the other 25 per cent open or light prairie; is that what you wish to convey?—A. Yes.

Q. 25 per cent?—A. Yes.

Q. Would you say that 25 per cent of that country would not be any harder to develop than the rest of the province of Alberta?—A. Yes, I think that would be reasonable.

Q. 25 per cent of 8,500,000 acres—I suppose I can make this statement—is just a little more than 2,000,000 acres?—A. Yes.

Q. Referring again to this document "Alberta, Canada" issued under the direction of the Hon. Geo. Hoadley, Minister of Agriculture, Province of Alberta; this is the 1925 edition. In 1911, 1,639,974 acres produced 36,602,000 bushels of wheat. Are you familiar with the statement made by Sir Henry Thornton that when a certain production would be reached a coast outlet would be justified?—A. I do not know whether I know about the statement that he said it would be justified, but I believe he made a proposal that he was ready to make a bargain with the Alberta Government when there was a certain production of wheat; that the Canadian National under other conditions would then go ahead. I do not know that he did make the statement to the effect that it would be justified.

Q. Was 1911, so far as you can recall, an average year?—A. Well, I do not recall it one way or the other.

Q. You do not dispute the fact that 1,639,000 acres produced 36,602,000 bushels of wheat?—A. Well, I am not quite clear just what kind of acres you are talking about. Are you talking about acres under production or acres in the district?

Q. No, acres under crop?—A. Under crop? Oh, well, that is different.

Q. You use as an illustration of the rate with which this land might be developed, land near Winnipeg; do you still think that illustration is true?—A. In a general way. As a matter of fact, Mr. Sullivan can take care of that question much better than I can. I generally say it is still true.

Witness retired.

J. G. SULLIVAN, re-called.

By Mr. Kennedy:

Q. At page 11 of the Report it is stated: "Another example, where there is no penalty on account of high freight rates, is the wooded lands within 50 miles of Winnipeg, some of the best soil in the world, and not 50 per cent developed although they have had railway facilities for over 40 years." Do you think, Mr. Sullivan, that is an actual statement of fact?—A. I thought that possibly some statement like that might be brought up, so I went to the Department of Public Works in Winnipeg before I left and I have some figures here that I will give you. That statement, Mr. Chairman and gentlemen, referred to land that is covered with timber, not the prairie land surrounding Winnipeg. I was Chairman of the Drainage Commission of Manitoba for a number of years and we had an actual survey made of lands within the drainage districts. According to that survey, in 1919 and 1920, the cultivated land within the

[Mr. J. G. Sullivan.]

drainage districts, which are rather highly developed, was 84,130 acres; uncultivated was 1,194,462 acres. The area of occupied farms is given at 14,615,844 acres, of which 8,000,000 odd are improved and 6,000,000 odd are unimproved. In the Department of Agriculture's publications it is estimated that there are 23,000,000 acres of farm lands in Manitoba that are capable of being improved, and that there are over 9,500,000 acres in use in surveyed areas. Now, whether the percentage is 40, 50 or 60 per cent, why, I could not testify to that. Any man that lives around Winnipeg can go east of Winnipeg and see land there that would not cost any more to clear than the timbered land in the Peace River district. It is not cleared and it is selling at about the same price, I should say, as the Peace River country. You have got cheaper freight rates there and there has been a railroad there for 40 or 50 years. The statement right before that is a pretty good one, "As an example of this slow progress we may mention the fact that for a distance of 60 to 80 miles through good land between High Prairie district and Spirit River district there has been practically no development, although they have had a railway for over 10 years."

Q. I am asking, Mr. Sullivan, if you still contend that that statement is a correct one? "Another example, where there is no penalty on account of high freight rates, is the wooded land within 50 miles of Winnipeg, some of the best soil in the world, and not 50 per cent developed although they have had railway facilities for over 40 years?"—A. Yes, sir.

Q. Are you submitting to us the opinion of the Department of Public Works of Manitoba?—A. Well, I got this from the Department, yes; if you wish to have it, you can have it.

By Hon. Mr. Dunning:

Q. It is not an opinion?—A. No, these are statistics; a table of the lands was worked out under my supervision, and done carefully; I was making a report.

By Mr. Gardiner:

Q. That land was situated in drainage areas?—A. In drainage districts.

Q. When did those drainage districts commence?—A. Over 20 years ago. I am only giving you my memory as I cannot say just definitely. Some of them over 20 years ago and some of them later.

Q. That would not be a fair comparison, to take a drainage district?—A. This survey of the cultivated lands was made in 1920. Some of these were nearly twenty years old at the time.

Q. But I understand that in a drainage area of that description the development is much slower than what it would be in a district like Peace River?—A. No; I think in a great many cases, unless except district No. 8, it would be the reverse. The lands in district No. 2, nearly a million acres, were practically prairie lands. On the rivers coming down from the mountains the high banks, or the silting, made a kind of dyke, and the draining of that was very easy. District No. 8, I will grant you, was a little different; that was wooded. I have District No. 2 here, nearly 440,000 acres, and there is 158,000 acres of that which was not cultivated at the time we made the survey.

By Hon. Mr. Dunning:

Q. When you speak of drainage districts, you mean districts in which drainage is being done?—A. No, it is a little different there. They had a drainage Act there which provided that any district could organize, and the Provincial Government financed the work and did the work. The Act provided that the municipalities should maintain the ditches, and there was no protection through assessment to the municipalities. Once you organized a district and assessed them for the construction and the interest on capital, then it left it

up to the municipalities to maintain the work. You can readily see that a municipality that only had a small area in the district would not do any maintenance work, they would not take the money out of the budget. That is, the man on the high lands would not stand to be taxed. It got to be a very acute question and they appointed a Commission to investigate and report as to what should be done. In doing that we thought it necessary to recommend that the maintenance be put on the same basis as the capital distribution, that it should be taxed in accordance with the benefits derived from the works. In doing that we found it necessary to get the area of the land that was most benefited; that is the reason why this survey was made.

Q. My point is; if these lands are undrained, is it fair to make a comparison with the Peace River land?—A. When they organized the districts the money was spent and the drainage district was put in. In some cases they were not maintained very well, but there is very little land that was ever improved, with the exception of one district near Gladstone.

By Mr. Kennedy:

Q. Does this part of the report mean that the reason these lands are not developed is because there is brush on them the same as there is in the Peace River country?—A. That is my opinion.

Q. And your authority for that is, if I understand it correctly, your own experience, supplemented by evidence from the Department of Public Works?—A. I only got this a few days before I came down.

Mr. KENNEDY: I wrote to two different parties in the province of Manitoba, Hon. John Bracken, the Premier of Manitoba, and Mr. Howard Grant, Professor of Rural Economics. I wrote them and quoted this section of the report, and I have their replies here.

Hon. Mr. DUNNING: I think that is all right, that is a different thing entirely.

By Mr. Gardiner:

Q. Is there any area in the Peace River that is comparable to the situation at Winnipeg, in your judgment?—A. Well, let us understand each other. If we will take the land 25 or 30 miles east of Winnipeg; a great deal of it was originally covered with timber and is yet. If you will take that land and take the land in the Peace River country, I would say, yes, there is a great deal of it that is comparable. The land in the Red River Valley, if anything, I think is better, it is deeper soil.

Q. The point I want to get at is this; in this statement you make a comparison of lands situated around Winnipeg and in your evidence you mention the land not being cultivated within certain drainage districts. Is it not a fact that the cause of the land needing drainage was the reason for it not being developed?—A. Oh, no. There is a great deal of this land contiguous to Winnipeg that is not in the drainage districts at all.

Q. I am speaking of the lands you have given evidence on this morning, included in the drainage districts, and which you have used as a comparison?—A. That land was drained, sir.

Q. Yes, but is it not a fact that because it required drainage it was not developed as it should have been?—A. You have not got the facts yet. That land was drained 15 to 20 years before we made this survey.

By Mr. Milne:

Q. Could I ask the engineer what effect the drainage had on the price of the land?—A. Well, that leads up to another question. When these people were putting in the drainage districts, the Act said that the cost of the drainage should be distributed in accordance with the benefits derived, but no machinery

was provided for putting that into effect; it was left to the Provincial Engineer. You can readily understand what would happen to an engineer who would charge John Jones two cents more than he did Peter Brown, regardless of what the effects were. He did what any man would have to do who was in the public service, he simply charged every one alike. There was another provision of that Act which stated that the lands could not be assessed at more than they were at that time.

Mr. DENIS (Joliette):—I think we are far afield.

The CHAIRMAN: So do I.

Mr. SULLIVAN: I want to get this thing clear in this member's mind.

By Hon. Mr. Dunning:

Q. What is the present selling price of land in this area?—A. Those lands were all privately owned.

Q. What is the present selling price of the brush covered land you are speaking of; that is, in the drainage district?—A. I guess Mr. James could answer that. I believe he bought a farm in the district.

Hon. Mr. DUNNING: Mr. James, what is the present selling price of that land?

Mr. JAMES: Before being cleared?

Hon. Mr. DUNNING: Yes.

Mr. JAMES: \$10 an acre.

Mr. DONNELLY: What does it cost to clear it?

Mr. JAMES: About \$20.

Mr. DONNELLY: What does it cost to clear in the Peace River?

Mr. JAMES: A lot of it would be about the same; some of it would be more.

By Mr. Jelliff:

Q. I would like to ask Mr. Sullivan in reference to this district he has just been speaking of; was there a railroad built through there?—A. Through where, sir?

Q. Through that drainage district?—A. Oh, yes, they all have railroad facilities; that is, most of them.

Q. And the development is slow?—A. Well, the Northern Pacific was built west from Souris a long time ago, where the large drainage district is.

Q. But they had the service in order to help them develop those lands?—A. Oh, yes.

Hon. Mr. DUNNING: I do not think he understands your question.

By Mr. Jelliff:

Q. I was trying to ascertain whether the fact that they were not supplied with railroads had anything to do with making it harder to develop?—A. Oh, yes, they had railroads.

By Mr. McLean (Melfort):

Q. Was it through lines of railroad or lines that were specially built to develop that district?—A. The main line of the C.P.R. touches one or two of them. The Northern Pacific, which later became the C.N.R., and the C.P.R. have several lines through those districts.

By Hon. Mr. Dunning:

Q. Is it not a fact that the railroads cannot get through that country very well without going through some of those districts; a railroad that crosses the country or is heading for anywhere else has got to go through those districts?—A. Oh, yes.

Q. Are there any branch lines that were built specially into this kind of country; feeders, and not lines that merely pass through to get somewhere else?—A. Yes, there is a branch line up in districts Nos. 8 and 12, I think. They were built about the time the development would warrant.

The CHAIRMAN: While all of this is very interesting with regard to Manitoba, I do not see that it has a very great deal to do with the other matter.

Discussion followed.

By Mr. Kennedy:

Q. The Hon. John Bracken, the Premier of Manitoba, and Mr. Henry Grant, of the Department of Rural Economics of the University of Manitoba, said there was no land of this kind undeveloped within fifty miles of Winnipeg. Do you disagree with that statement?—A. Any man who ever passed through Winnipeg on any road knows the answer to that question.

By the Acting Chairman:

Q. What is your answer? The same as it was before?—A. The statement that Mr. Kennedy made is not true; that is my answer.

By Mr. Kennedy:

Q. I quote the exact paragraph from this letter.—A. Did you ever ride on a train between Winnipeg and fifty miles east?

The ACTING CHAIRMAN: You should not ask Mr. Kennedy any questions. Discussion followed.

The committee adjourned until Thursday, March 31, 1927, at 11 a.m.

SESSION 1926-27
HOUSE OF COMMONS

SELECT STANDING COMMITTEE ON

RAILWAYS, CANALS AND TELEGRAPH LINES

Various Proposed Railway Routes for a Western
Outlet to the Pacific from the
Peace River District

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 5—THURSDAY, MARCH 31, 1927

WITNESSES:

Mr. C. S. Gzowski, Chief Engineer, Construction Department, Canadian National Railways.

Mr. Neil Gething, Hudson Hope, British Columbia.

Mr. James Dougall, Agricultural Agent, Canadian Pacific Railway Co'y.

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MINUTES OF PROCEEDINGS

THURSDAY, March 31, 1927.

The Committee met at 11 a.m., Mr. Young (Saskatoon), Acting Chairman, presiding.

Present—Messrs. Anderson (Toronto-High Park), Bell (St. John-Albert), Bothwell, Cantley, Cowan, Donnelly, Dunning, Evans, Fansher (Lambton East), Fansher (Last Mountain), Fraser, Gardiner, Girouard, Goodison, Heaps, Jelliff, Kellner, Kennedy, Laflamme, Lapierre, Lovie, Lucas, McIntosh, McKenzie, McLean (Melfort), Manion, Maybee, Mercier (St. Henri), Millar, Milne, Pouliot, Price, Ross (Moose Jaw), Rowe, Simpson, Smith (Cumberland), Spence (Maple Creek), Spencer, Sylvestre, Thorson, Totzke, Vallance, Ward, Young (Saskatoon)—44.

PEACE RIVER DISTRICT PROPOSED RAILWAY OUTLETS TO THE PACIFIC

On motion of Mr. Spencer,

Resolved, That Mr. F. H. Peters, Director and Surveyor General, Topographical Survey, Department of the Interior, Ottawa, be called for the next meeting at which the Peace River Railway is considered.

Mr. C. S. Gzowski was recalled and further examined.

Witness stood aside.

Mr. Neil Gething, Hudson Hope, British Columbia, was called and examined respecting coal deposits at Hudson Hope.

Witness retired.

Mr. C. S. Gzowski was recalled and further examined.

Witness retired.

Mr. James Dougall, Agricultural Agent, Canadian Pacific Railway Company, was called and made a short statement in reference to the evidence given by Mr. Gething.

Witness retired.

The Chairman read a telegram addressed to Mr. Kennedy from Premier Brownlee of Alberta expressing his expectation to be in Ottawa on Friday, April 8.

Bill No. 143—An Act to amend An Act respecting The Brandon, Saskatchewan and Hudson's Bay Railway.

Preamble read. Mr. Thorson (sponsor) and Hon. Mr. McGivern, K.C., counsel, addressed the Committee. Preamble carried.

Section 1—In the first line of section, after “authorized” the words “to enter into an agreement” were inserted. Carried as so amended.

Ordered, To report the Bill as amended.

Bill No. 144—An Act respecting The Midland Railway Company of Manitoba.

The Preamble having been read, Hon. Mr. Dunning, Minister of Railways and Canals, read a letter of protest against the passing of this Bill, received by him from Mr. D. L. McLeod, Public Utilities Commissioner of Manitoba. Mr. Thorson (sponsor) and Hon. Mr. McGivern, K.C., counsel, addressed the Committee.

SELECT STANDING COMMITTEE

In view of the protest registered from Mr. D. L. McLeod, Mr. Heaps moved, and it was,

Resolved, That this Bill stand over until the next meeting of the Committee.

Bill No. 174—An Act to incorporate the Red Lake and Northwestern Railway Company.

Preamble read. Discussion ensued.

It being 1.15 p.m. Mr. Evans moved, and it was,

Resolved, That the Committee do now adjourn.

The Committee adjourned until Tuesday, April 5, at 11 a.m.

MINUTES OF EVIDENCE

COMMITTEE ROOM 231,
HOUSE OF COMMONS,
THURSDAY, March 31, 1927.

The Select Standing Committee on Railways, Canals and Telegraph Lines met at 11 a.m., the Acting Chairman, Mr. Young (Saskatoon) presiding.

The CHAIRMAN: We will come to order.

C. S. Gzowski, recalled.

By Mr. Kennedy:

Q. Mr. Gzowski, I am looking at page nine of the printed report. You eliminate from all consideration coal as a traffic possibility if the Peace River outlet is built?—A. Except that portion which would be included in the general fifteen per cent.

Q. There is a reference in the report at page six that there is coal on the Contrary River—that is on the Monkman route; there is no mention anywhere, although the Peace route has been considered and reported upon, of coal at Hudson Hope. Do you know anything about any deposits there?—A. We were aware there was coal at Hudson Hope; I cannot tell you offhand.

Q. Now, we will go on to page eleven of the printed report. About the middle of the page you say: "The figure can be computed to be based on an average annual production of fifty million bushels of wheat, plus fifteen per cent other tonnage". How many acres did you estimate it would take to produce that—acres under cultivation?—A. We did not calculate it in that way; we calculated it on the basis of the area of economic land.

Q. Did you calculate it on the full development of 8,500,000 acres?—A. Yes.

Q. Now we will go on to the branch lines on page twelve of the printed report. You give here a set of figures regarding the branch lines in the various zones?—A. Yes.

Q. Would the same location be chosen for branch lines regardless of the route?—A. I think not.

Q. You think that if the route to Obed was built, it would require a different set of branch lines from the Monkman route or the Peace route?—A. Oh yes, I think it would, in some particulars; some would be common.

Q. Do you think a different set of branch lines would be required to serve the country by the E.D. and B.C. from any of the Pacific routes?—A. You mean on the basis that there never would be a Pacific route?

Q. Well, on this basis: if branch lines are constructed now to serve Pouc Coupe, to serve the Water Hole district, and to serve the western and eastern sections of Grande Prairie—if these branch lines are laid out with the E.D. and B.C. as the main outlet, will these branch lines be the best kind of branch lines for any of the Peace outlets that may be built to the Pacific coast?—A. Not unless the possible outlets to the Pacific coast were taken into consideration.

Q. Do you look on the construction of the Peace outlet as an ultimate necessity?—A. Do I?

Q. Yes?—A. Yes, as an ultimate necessity.

[Mr. C. S. Gzowski.]

By Hon. Mr. Dunning:

Q. Have you the report before you? There was a quotation made a moment ago which was not completed; that further paragraph (indicating) completes it.—A. Mr. Dunning has called my attention to a part of the clause on page eleven of the printed report where we say: "We do not pretend to say this is a definite ultimate tonnage because that finally will depend on further railway mileage and the number of settlers involved." I think Mr. Dunning is afraid that when I said to Mr. Kennedy that that was ultimate, perhaps the answer meant the whole district. I thought the question was limited to the area under consideration. I think that was your question, was it not, Mr. Kennedy?

By Mr. Kennedy:

Q. 8,500,000 acres?—A. It was the limited area.

Hon. Mr. DUNNING: The engineers have reported there was further ultimate development possible.

The WITNESS: I took the question to limit it to the area considered in the maximum traffic.

By Mr. Kennedy:

Q. Do you think it is wise or fair to go on developing a branch line mileage in connection with the system that ultimately must be sacrificed to some extent when the Peace outlet is built?—A. I think it would, if you went too far with your present branch line system, and gave consideration to it, but I do not think the development as contemplated at the present time means that the branch lines would be very much different from any western outlet, but it is quite conceivable. Of course, there might be branch lines laid down which, if extended very far, would not work in as well as some other branch lines, in the event of certain locations of the outlets to the Pacific.

Q. In that case you would have either duplication of your branch line mileage, or you would have lines located where they would be of secondary advantage.—A. I do not see why you would have any duplication whatever. The route might not be as advantageous for some specific outlets, but I cannot see why you would have any duplication at all.

Q. The province of Alberta has to-day given the railway service to the Peace River such as it has, has it not?—A. Yes, through that and the C.P.R.

Q. Part of the Peace River country is, however, in British Columbia?—A. Yes, if by the Peace River country you mean the drainage area into the Peace River. I am always stuck when people ask me a question about the Peace River district, to get a definite definition of what is meant by that.

Q. Take the block; that is good enough for the purpose.—A. The area we assumed?

Q. Yes. There is one zone at least in British Columbia which includes the Peace River block?—A. Yes.

Q. It is unreasonable to expect that the branch line mileage will be constructed there for some time by the province of Alberta?—A. I do not believe the province of Alberta will ever build mileage in another province.

Q. It looks as though, unless the Dominion government takes a hand, they may have to wait a while?—A. I do not see why you should draw such a conclusion; it would be possible for the province of British Columbia to build in the area adjoining the Peace River block, and join up with the province of Alberta.

Q. Unless we finally determine in the near future what outlet is to be built from the Peace River country to the Pacific coast, it would be very difficult, would it not, to lay out a branch line system that would give service to the

settlers in the Peace River country to-day, which would ultimately be of first-class advantage in the development of the country?—A. My answer to that, if you omit the word "immediately" or words to the effect of the near future" would be yes; I would agree with that, but I do not believe the immediate branch lines constructed in the Peace River district would be seriously affected at all by the eventual Peace River outlet.

Q. Are you aware that the settlers in Pouee Coupe are about sixty miles from a railway at the present time?—A. My recollection is that it is not quite sixty miles; it is in that neighbourhood, but I think it is something short of that.

Mr. SPENCER: One of the witnesses the other day, Mr. Chairman, told us that settlers were as far back from the railway as eighty miles in some places.

The WITNESS: I suppose you could find an isolated case.

Hon. Mr. DUNNING: Was that not in reference to the Peace River block in British Columbia?

Mr. SPENCER: No, it was in Alberta.

The WITNESS: There are some people away up north who probably are that far away.

By Mr. Kennedy:

Q. There is a paragraph at the bottom of page thirteen of the report which says: "The new investment is the money necessary to build the lines, terminals, and purchase the additional equipment required. The cost of construction for the initial scheme is based on the customary methods of railway building, that is to an extent using temporary structures such as timber—trestles, and so forth. For the maximum traffic which is assumed to be reached in twenty-five years, a percentage has been added for replacements and betterments which would become necessary by that time." Is that not a process which is going on practically always in connection with railways?—A. If constructed in the normal way we have in this country. Hon. Mr. Oliver when he was giving evidence here showed that the Pacific Great Eastern is up against just about that particular condition, that the life of the wooden trestles has just about expired, and a large sum of money—and I think he mentioned the sum—would have to be very soon expended.

Q. That happens with the Canadian National Railway?—A. Yes, of course it does. That is one of the reasons for additional capital on the Canadian National.

Q. On page fourteen you say: "In the case of the maximum traffic for the western outlets, it is figured 9,000 new freight cars would be required on all routes except the Stewart, where only 6,000 would be needed." In connection with maximum traffic around by Edmonton, would it require more or less than by the shorter mileage?—A. More by the longer mileage.

Q. You admitted yesterday that any of these Peace River outlets would be to some extent colonization and development lines?—A. Yes, to some extent.

Q. I want to show you the Canadian National program for this year. Is there any reason why the feasibility or the probability of this outlet should not be judged on exactly the same basis as that program?—A. Well, are you talking of the program as a whole or are you talking about any individual line?

Q. Well, they are practically all equal; the heading includes the whole bunch.—A. I do not know of a line in our Canadian National Branch Line program, that has just been passed, that has a single line in it that is comparable to the proposed Peace River outlet; I do not know of one.

Q. Well, when you come to comparisons, of course—A. Well, I thought you were asking me to say something about comparison.

Q. Yes, I was.—A. Well, I do not know of one thing comparing—

Q. What is the justification for a colonization line or a development line?—

A. The opening up of land and making it available for settlement.

Q. Is there not also this consideration from a railroad standpoint; that when you have your expensive main lines completed, you can open up, by the cheaper type of colonization lines, lands that are possible of development?—A. Yes; presuming they are laid down in areas where there is some possibility of developing the land quite easily.

Q. The lines running west through the mountains, the Monkman and the Peace River, bring the Peace River country nearer to Prince Rupert than to Vancouver, generally speaking; is that not the fact?—A. You mean it is shorter?

Q. Yes, shorter.—A. Yes.

Q. The Obed route brings the Peace River country nearer to Vancouver?—

A. Yes.

Q. On page 16 of the report there is this statement:

Although during the crop-year ending July, 1924, about 25 per cent of the grain shipped from Vancouver was destined for the Orient, this proportion has now been greatly reduced, on account of the increased price of wheat. It appears that the Orient will only be in the wheat market when the price of that commodity is very low.

In that paragraph, as I understand it,—correct me if I am wrong,—you are demonstrating that Vancouver is the port to be considered as the export port?—

A. It was pointing out one of the considerations; it was pointing out the difference between Prince Rupert and Vancouver so far as the distance to the Orient was concerned, and it was pointing out some of the factors to be taken into consideration in the economic study; whether you were going to select Prince Rupert or Vancouver for 100 per cent of the traffic, or whether you were going to give greater weight to Vancouver, or fifty fifty. We set up our economic study, as shown in Tables 1 and 2, three ways.

Q. Yes, it has considerable bearing when you come to the question of which route should be built, has it not?—A. As to what weight should be given. That is why we set it up three ways, so that anyone could draw their own conclusions.

Q. I have here a volume entitled "Trade of Canada", and I think it has a bearing on that. On page 464 there is shown the export of wheat and wheat flour from Canada to China and Japan. I will read them.

Wheat to China:—

	Bushels
1923..	770,907
1924..	5,206,820
1925..	2,396,474
1926..	7,167,109

Wheat to Japan:—

1922..	2,425,915
1923..	2,610,012
1924..	7,058,910
1925..	4,633,941
1926..	11,527,266

Wheat flour to China:—

	Barrels
1922..	13,358
1923..	207,526
1924..	504,923
1925..	345,726
1926..	1,087,024

Wheat flour to Japan:—

1922..	47,619
1923..	124,953
1924..	101,965
1925..	19,299
1926..	104,669

Hon. Mr. DUNNING: What is the question?

By Mr. Kennedy:

Q. The question is whether or not you still wish to contend that Prince Rupert should not be considered important from the standpoint of export to the Orient because of the fact that wheat will not go to the Orient when the prices are higher?—A. I am not quite clear as to what the question you have put to me is in connection with these figures, but I take it that you are asking me whether that bears out the statement on page 16. Well, I have not had a chance to study the figures you give but it looks as though when the price of wheat was down the sales were increasing, and vice versa. I am not clear on that and I would have to go into it, be given an opportunity of looking into it closely. It does indicate, as far as I can remember the prices, that—

Q. It does not bear out the contention that wheat will not go to the Orient in quantities?—A. No, but the price has a relation to it. Is that not what we said?

Q. Well, low prices for wheat—A. Yes; in other words, if the price of wheat is lower the tendency is to go to the Orient; if the price goes up the tendency is to decrease. But as to Vancouver and Prince Rupert, we have shown by Tables 1 and 2, and also Tables 3 and 4 in the summary tables; we have tested it on the basis of fifty fifty between Prince Rupert and Vancouver, and on that basis there is no difference in the selection of the route.

Q. I just want to ask you one question regarding rates. There is considerable of this report devoted to showing that the grain rates are not profitable; is that the contention of the Report in that respect?—A. It was to indicate that the grain rates were generally low, and as a matter of fact at the time the Report was written, in my opinion, the grain rates were not profitable, if you take into account the fixed charges, which I think must be included in ascertaining profits.

By Mr. Gardiner:

Q. Does that apply to the grain rates in the West, Mr. Gzowski, or to that particular area?—A. That is generally speaking. Of course, you see, the grain rates are so arranged that the shorter haul will give a greater rate per ton mile, and the longer haul a less rate per ton mile.

Q. I was asking you the particular question as to whether the statement you have just made applied to grain rates in Western Canada as a whole, or whether it was only to this particular area?—A. I said as a whole. The Report refers to different grain rates but my general statement was used as a whole.

Q. Well, I think that before the Committee is done with you we ought to have that point cleared up, because that is not according to the evidence given before the Board of Railway Commissioners?—A. Oh, yes, I believe that both

[Mr. C. S. Gzowski.]

the Canadian Pacific and the Canadian National Railroads have given evidence to the effect that the grain rates do not cover the cost.

Q. Oh, no.—A. Well, the Counsel for the Canadian National so advised me. I have not read the evidence, but Mr. Fraser, the Counsel for the Canadian National Railways—

Q. If you are appearing before the Committee at another time I will bring that evidence down and we will see whether your statement is correct or not?—A. Well that is on the advice of Counsel for the Canadian National Railways.

By Mr. Kennedy:

Q. You are not a rate expert?—A. No sir, I am not.

By Mr. Fansher (Last Mountain):

Q. There is one question I would like to ask Mr. Gzowski which was not quite clear in my mind. Speaking of the export of wheat to the Orient being governed by low prices; there was nothing mentioned about the grade of wheat, whether that was No. 1, 2 or 3, or whether it was wheat of inferior grade that was sold at low prices?—A. What we had in mind, from the information that we obtained at that time, was the prices, whether it was due to the low grade or whether it was due to the low price of all wheat. In other words, generally speaking the Orient could not afford to pay more than relatively low prices for grain. Whether the price was due to being a low grade of wheat or whether it was that the higher grades of wheat were selling at low prices, the effect was the same.

By Mr. Spencer:

Q. You state that the grain rates did not pay. How is it that the greatest profits made by the railroad companies are when they are moving grain? Secondly, why is it that the Immigration Department lays the greatest stress on bringing in more people to grow more grain to put on the railroads?—A. Well, Mr. Chairman, that is a subject that is too big for me. It has taken the Board of Railway Commissioners a large portion of their time to consider that question, and I am sure I am not competent to take care of it.

(Witness stood aside.)

NEIL GETHING, called.

By Mr. Kennedy:

Q. Will you tell the Committee just who you are and where you reside?—A. I am the discoverer probably of the Hudson Hope coal and I live at Hudson Hope, British Columbia, just on the east side of the Rocky Mountains. We have discovered a very large body of very high-grade coal and it is very important to us, from the coal mining standpoint, that we have transportation. I am going to discuss this coal from the standpoint of the Geological Survey Report. The Geological Survey of Canada has reported 84,000,000 tons of coal in seven square miles in the Peace River Canyon. We estimate we have holdings of about 42,000 acres and that we have 300,000,000 tons of coal. We estimate that we can supply in a year's time a million tons of tonnage annually. We have looked over the situation and we are confident that we have a market for that amount of coal. We expect to go as far east as Winnipeg, and if we could get the rates we could go to Toronto. Our coal would not require coke ovens; our coal is a smokeless, sootless coal and does not coke. While it is not a true anthracite it will take the place of the Pennsylvania anthracite in every way. At Hudson Hope at the present time we are burning it in base burners and we find it will burn just as good as Pennsylvania anthracite.

[Mr. Neil Gething.]

By Mr. Fansher (Last Mountain):

Q. Has it the same heat units?—A. I have one of the reports of the heat units here, the analysis.

By Mr. Kennedy:

Q. Will you file that analysis with the Committee?—A. Yes. The heat units run 15,298 b.t.u's, and we have a fixed carbon of as high as 82 per cent, and our ash runs as low as 1.5 per cent. Gulick-Henderson Company made an analysis in Chicago. They are also situated in Montreal and without solicitation they said that it is one of the best analyses that they have ever made, and they have analyzed thousands of samples of coal. So that it is not my opinion about its being a high-grade coal. We have an immense amount of coal through the Rocky Mountains, but all the coal, so far as I know, is coking coal, outside of the lignites. Of course, this coking coal cannot be used successfully for domestic purposes, simply because when it starts to coke it begins to slow down. This coal does not coke and it will burn just like anthracite burns, all up.

Q. Was there a test made of this coal on the E.D. and B.C. Railway some years ago?—A. We sent out 40 tons to the Canadian Pacific Railway, who at that time were operating the E.D. and B.C., and the engineer and fireman who made the test told me that it gave results of almost three to one in comparison with the coal they were then burning. They are burning Canmore coal, which is considered a very good coal. The Canmore coal is a very smoky coal; this coal does not smoke at all and there is no soot.

By Mr. Spencer:

Q. Why did they not continue using it?—A. They were very anxious to use the coal but we have been handicapped in getting it out. We are 250 miles from Peace River Crossing, where we ship it to, and while we could get it down from Hudson Hope, the mine is about 15 miles above and there are some rocks in the river that obstruct it in a general way. The steamboat has been up to the mine but it can only get there in high water. If these obstructions were removed, of course we could ship by steamboat.

By Mr. Gardiner:

Q. Can this coal be handled several times without slackening?—A. To give you an idea of this coal; this coal is found in the Canyon of the Peace River in perpendicular walls as high as this building, about seven or eight hundred feet, and the coal often projects out beyond the rock. It has stood there for millions of years and it does not slack at all, just stands out beyond the rock.

By Mr. Spencer (Maple Creek):

Q. Will you kindly indicate on the map just where that area is?—A. This area is found just west of the Peace River block and in this bend of the river. This is Bullhead Mountain (indicating) and this coal is really the first up-tilt of the western plain. This is the first mountain and this is the up-tilt that brings out the coal. It is found in this canyon down to about this point (indicating).

By Mr. Gardiner:

Q. How many tons would you sell per annum if you had transportation?—A. At the present time we calculate we could sell a million tons of this coal and interfere very little with any of the other coals that are being mined. We can take the place of all the Pennsylvania anthracite that is being used in Western Canada, and also the blacksmith coal. We have one seam that is smithy coal. I think at the present time both railroads use anthracite in the dining cars all through the prairie country.

Q. Are you satisfied you have a market for a million tons with the possible development of a greater amount?—A. Yes, and that would be interfering but very little with the present run of coal. It would take the place of the American coal.

By an Hon. Member:

Q. How far is this coal from railroad facilities?—A. The coal at the present time is 250 miles from the crossing of the Peace River. While we are not 250 miles from a railroad, that is the point we have to reach by water.

By Mr. Spence (Maple Creek):

Q. I understand you to say that the boats go right up to where you are working this mine?—A. In high water, yes.

Q. Is there any possibility of improving the channel to make it possible to get up there even during low water?—A. There is one place where there is a big rock in the middle of the river. I think there has been an application made to have it removed, by the Hudson Bay Company, who own the boat. If that big rock was removed it would increase the length of the season to about double what it is at present. At the present time it is not safe with that big rock standing up in the middle of the channel.

By Mr. Fraser:

Q. What is the present period of navigation?—A. Our present period of navigation is about five months.

By Mr. Fansher (Last Mountain):

Q. Do you mean to say that if that rock was removed it would be double that, ten months?—A. No. We cannot use all of the navigable season now. I understand five months is about the time that ice is out of the Peace river, but at the present time the only time we can go up there is during the high water period.

By Hon. Mr. Dunning:

Q. You think it would be more economical to build a railroad into the mine than to make the river navigable?—A. The river is only good for five months in the year and it is in the winter time when the coal is needed the worst. We could ship 3,000 tons a day right along from that mine. We can load cars there at the rate of a thousand tons a day. We would have to find out first of all where to put our portals when the railroad came in, that is one reason why we are handicapped in our present development as we do not dare to go ahead with any big development.

Q. This coal has been tested in locomotives on the E. D. and B. C.?—A. Yes.

Q. According to your statement, it is both steam coal, suitable for locomotive purposes, and at the same time a good domestic coal?—A. Yes. I think it is equal to the Pennsylvania anthracite.

Q. And it will burn in an ordinary locomotive and give better results than ordinary steam coal?—A. Results of three to one. I think the Canmore mine is considered one of the best mines they have.

Hon. Mr. DUNNING: What about the Canmore, Mr. Sullivan?

Mr. SULLIVAN: I am not a coal expert, but the Canmore is a good steaming coal. There is also good coal west of Edmonton.

By Hon. Mr. Dunning:

Q. If this coal is as you describe it it is certainly unique; there is no other coal just like it?—A. Here is the analyses that show one and a half per cent ash.

By Mr. Kennedy:

Q. Will you file those with the Committee?—A. Yes.
[Mr. Neil Gething.]

CERTIFIED COAL ANALYSIS

GULICK-HENDERSON CO.
Chemists and Inspecting Engineers
Chicago, Pittsburgh, New York, Philadelphia

Dr. J. W. GETHING,
Battle Creek, Mich.

431 S. Dearborn St., Chicago, Ill.,

February 2, 1927.

DEAR SIR.—Below we give you results of analysis on sample of Coal. Laboratory number 46580. Date received, January 31, 1927. Description and marks. Peace River Anthracite Coal. Sample taken by your representative.

ANALYSIS

Analysis of sample as received

	Analysis figured to Dry Basis
Moisture	1.44
Vol. comb. matter	21.98
Fixed carbon	75.05
Ash	1.53
	100.00
Sulphur59
B.t.u. determined by Parr Calorimeter	15078
	15298

We certify to the correctness of the above analysis.

GULICK-HENDERSON CO.

(Signed) E. J. SCHWARTZES,
District Manager.

MILTON HERSEY CO., LTD.

INDUSTRIAL CHEMISTS, ENGINEERS AND INSPECTORS
Montreal, Winnipeg

84 ST. ANTOINE STREET,

MONTREAL, Jan. 17, 1927.

REPORT 59672—SAMPLE OF COAL—FROM MINE ON PEACE RIVER AT HUDSON HOPE, B.C.

Mr. NEIL GETHING,
c/o J. W. GETHING,
408 Post Building,
Battle Creek, Mich.

DEAR SIR.—We have completed the analysis of the sample of Coal referred to in your letter of the 10th inst. and the results obtained are as follows:—

Moisture	0.80%	Volatile Matter	22.55%
Vol. Comb. Matter	21.75%		
Fixed Carbon	75.85%		
Ash	1.60%	Coke	77.45%
Sulphur		0.54%	
Total Comb. Matter		97.60%	
Character of Coke		Caked	
Colour of Ash		Dark brown	
Heating Value (In terms of British Thermal Units)	14,973		

This sample would be classed as semi-bituminous coal and is of very excellent quality, with very low ash and sulphur and high thermal value. It should be particularly good for smithing purposes.

Yours truly,

MILTON HERSEY COMPANY, LIMITED,

ROBERT JOB,
Vice-President.

[Mr. Neil Gething.]

By Hon. Mr. Dunning:

Q. How does that analysis compare with the analysis of other Alberta coal? You state fifteen thousand b.t.u's?—A. 15,298.

Q. Have you a comparative analysis of the other Alberta coals?—A. I think the other Alberta coals run around 68 per cent for fixed carbon, and about 14,000 b.t.u's is considered high. I have a report here also from Milton Hersey showing moisture—80 per cent, volatile matter—22.55 per cent, fixed carbon—75.85 per cent, and ash—1.60 per cent.

The CHAIRMAN: We will file this with the other report.

By Mr. McLean (Melfort):

Q. What does the other coal show?—A. I cannot say what announcement they have made; I think all this coal has been taken.

Q. An analysis by itself would not be of very much value to a committee like this unless you had a comparison with other coals, by the same authority. For instance, the University of Alberta would test a lot of coal and would have a certain method of testing it which would give them a uniform result, and another laboratory testing it might get an entirely different result from coal from the same seam or the same mine.—A. Oh, I don't think so; no; oh, no, that is not my opinion. I think any people who are competent to analyze coal would get the same analysis. I would have faith in both Milton Hersey and University. That has been tried in McGill University. This was discovered by a McGill University man, a man whom I took in with me; I discovered the coal, and had a man by the name of Johnson, one of the Johnsons who own the asbestos in Quebec. He is a graduate of McGill.

Q. Would you say a sample of coal going to Milton Hersey in Montreal would be in the same condition as it would if it were going to Edmonton?—A. Oh, yes, it would keep for a thousand years and still be in the same condition; it does not show any sign of deterioration at all.

By Mr. Lucas:

Q. What moisture has this coal?—A. It varies from one and a half per cent down to as low as one-half per cent; 1.44 is the highest I ever saw.

By Mr. Spence (Maple Creek):

Q. That seam opens up in the canyon of the river?—A. Yes. I might say there are seven or eight different seams of coal; there has been a big seam discovered since it was reported on by the Geological Survey.

By Mr. Fraser:

Q. You pointed out the possibility of the coal; have you done any investigation work with regard to the mineral possibilities of that country?—A. Yes; there is also a large deposit of iron ore that has not been looked over by the Geological Survey as yet—of magnetic iron, magnetized iron. That is up the Peace River about sixty miles above this coal. There is also a very large deposit of silver lead ore, galena ore, both on the Omineca and the Injinika rivers. I think the government of British Columbia has sent a man in to look it over. I also saw the showing of the Chopin in the early days, but the showing on the Injinika and the Omineca is greater than what it was on the Chopin, so we have reason to believe there will be an immense amount of silver lead shipped from that country.

Q. The development of railway facilities would open up that country?—A. They would begin to ship out immediately. One seam of ore which is owned about twelve miles up the Injinika river is quite low, probably not over a thou-

[Mr. Neil Gething.]

sand feet above the river, and they have already taken gas boats drawing four feet of water up the river past this property, and they have ten feet of solid clay gelena showing on the surface there, and have traced it quite a distance.

By Mr. Millar:

Q. Approximately how much of this coal has been mined at the present time?—A. There has not been a great quantity of coal mined. Most of the coal which has been mined was lying at the portal of the tunnel. We have been able to ship but very little. We have also made some shipments of blacksmithing coal to the Peace River crossing. We found it was a splendid coal for blacksmithing, but there is only one seam which we have, because coal must be coking coal for blacksmithing; the other seams are not suitable for blacksmithing coal like we use for domestic purposes.

By Mr. Spence (Maple Creek):

Q. How wide is this seam?—A. Seven feet in thickness—seven feet of clean coal.

The CHAIRMAN: Are there any other questions?

By Mr. Spencer:

Q. When did the Geological Survey make the survey of these mines?—A. In the summer of 1922.

By Mr. Evans:

Q. Is this mine on the north side or the south side of the Peace river?—A. On both sides of the Peace river.

Q. Have you considered which way the railway should come to your mine, or which way the railway should be built?—A. Any railway going up the Peace river would open up the coal. Of course, we cannot open up the portals until we know where to connect with the railway, but any road would open up this coal, because it is lying on both sides.

By Hon. Mr. Dunning:

Q. And no road through either of the other passes mentioned in the engineer's report would be of any use to you?—A. It would be useless to our mine; we would have to have transportation through to the Peace River valley, and also for the iron ore and silver lead ore above.

Q. You know nothing of similar deposits in either the Pine pass or the Monkman pass?—A. There is coal about twenty-four miles south of us in good quantities, but it is a different grade; it seems to be similar to the Yellow-head coal.

By Mr. Kennedy:

Q. Would a branch line to Spirit river to connect with any part of the E. D. and B. C. develop your property?—A. Of course, the railway that comes from the east gives us a market east, but we hope to ship this coal to Vancouver. It is equal to the best Welsh coal and would be used for bunker coal.

By Hon. Mr. Dunning:

Q. You want to get it to the coast?—A. We want to get it both ways.

By Mr. Lucas:

Q. How many years have you been in that country?—A. About twenty-five years, off and on.

Q. And what, in your opinion, is the best outlet to serve that country?—
 A. Well, I have looked over the whole country. The first thing which struck me was Doctor Dawson's report. He has been a great guesser for Canada; he says there will be 60,000,000 bushels of wheat there, so I looked it over—I was interested in the minerals, of course—and I thought if his prophecy would come true, the best route would be through the Peace river to Finlay Forks and from there south to connect with the railway at Prince George. I think at Finlay Forks eventually there will be a line built through to the coast.

Q. Can you outline on the map the line which you suggest?—A. This is the Finlay Forks, 225 feet lower than Edmonton on the prairie, and theoretically, it would run downhill to this point. There are two rivers in which there are passes, one pass on what is known as the Omineca river and another on the river called the Inginiaka, which is about 70 miles up the Finlay river, and comes in from the west. I was talking to an engineer by the name of D. O. Lewis, and he has done some reconnaissance work, and says they can go through to the end of the canal there. I think Mr. Lewis built eight or nine miles of railway for Mann a number of years ago.

The CHAIRMAN: That is all; thank you very much.

The Witness retired.

Discussion followed.

C. S. Gzowski recalled.

By Hon. Mr. Dunning:

Q. You heard Mr. Gardiner's remarks just now that more important evidence has been given in the last few minutes than you engineers had given in several weeks?—A. Yes.

Q. What have you to say about that?—A. It sounded to me like a promoter owning a large coal area; he said he had large bodies of high-grade coal, and he had a market for a million tons in each place. That must be high-grade coal if that is the case because he would be in direct competition with all the coal mines of Alberta. I understand the figures are such that the coal mines of Alberta could have an output of three times their present one. If his coal is as he claims, he would put every other coal mine out of business.

In my capacity on the Canadian National Railway from time to time, we have requests made to build some railroad facility into a certain coal area, and these are examined more or less in detail, first, from the railway standpoint, and then from the coal standpoint. The reports on the coal end are submitted to coal mining engineers, and I will say that for every branch line application which comes to us—or almost all of them—it is said they are the greatest traffic producers, and that the coal proposition coming up before the Canadian National Railway seems, according to the promoters, to be a little better coal than any other coal in the whole neighbourhood. As Mr. Dunning has pointed out, the whole shaded area in Alberta and part of British Columbia is said to have coal measures. The Hoppe coal field through which we tried to get a line, instead of the Obed line, claimed they had the best coal in the west, and the figures sounded very much like the figures given by the last witness. So, as a matter of fact, we were not unfamiliar with the coal in that whole general area; in fact, you cannot go into any pass in the Rocky Mountains and not find coal. I think that is a safe statement. The whole area is substantially just one big coal measure. I do not think there is any place where you cannot get coal in quantity; as to the quality, I do not know. That is a matter for examination. I do not know how far this property has been developed. There have been many coal mines opened up in Alberta and British Columbia and when they began opening them up, people put their money into coal and thought they were going to get good coal. Some have met with some success, while others have shut down.

[Mr. C. S. Gzowski.]

By Mr. Heaps:

Q. What is the total output?—A. I do not recollect now.

Q. Three thousand tons per day seems to be a rather large output?—A. Yes, that would be a large quantity.

By Mr. Gardiner:

Q. Have you any information with regard to the minerals which Mr. Gething has mentioned?—A. Nothing definite.

By Mr. Kennedy:

Q. You are not in a position to say that Mr. Gething's statement to the Committee is wrong?—A. No.

Q. It may be made from past experience?—A. I think any promoter's statement must be taken—

Q. Can you tell me any railway built into a mountain pass with coal deposits in that area, which did not get considerable tonnage and revenue from coal?—A. I can tell you of one section of the Grand Trunk Pacific after the tracks were moved over to the Canadian Northern. Some 18 or 19 miles of the Grand Trunk Pacific were left down; in fact, in order to take the heavier rails to France, the road was relaid with lighter rails, in order to serve the Pocahontas mine, and to-day that mine is closed down.

By Mr. McLean (Melfort):

Q. Are there not plenty of mines in Alberta which could be equipped to turn out 3,000 tons per day?—A. Any mine could, in time; it takes time to develop a tonnage.

Q. Is it not simply a matter of equipment?—A. Yes, and developing the mine.

By Mr. Lucas:

Q. You made a statement here that if Mr. Gething could get one million tons of coal it would put the other coal mines out of business. I understand that Mr. Gething's point was that the coal which they would ship out would not compete with a lot of this other coal in Canada, but would displace a lot of the anthracite coming in from the United States.—A. To what part of Canada?

Mr. LUCAS: I would like to have Mr. Gething explain that point; it is in direct contradiction to what Mr. Gzowski has said.

Mr. GETHING: In reference to this coal to which I refer: it would mean about 3,000 tons per day. We could easily take that off, and the reason why this coal would not come into competition with other coal is that it is a different coal entirely. Why do the C.P.R. buy coal at the present time—anthracite coal—to burn on their diners, etc.? I have looked up the records and find a lot of anthracite coming into Winnipeg. We hope to get as far as St. Paul with our coal. This coal is of a different class entirely from the other coal we are talking about along the foothills of the mountains. Ours is coking coal—a high-grade coal, while the other is not suitable for domestic purposes. We would just displace the American coal coming in, and it would be used probably to a greater extent for railways. They would use it instead of the American coal, because our coal is better coal. This coal is equal to Welsh coal, and has been so stated in a report made by the government of British Columbia. I am familiar with the coal in the Rocky Mountains, and there is no place where they are mining better coal at the present time.

The WITNESS: What about Bank Head?

[Mr. C. S. Gzowski.]

Mr. GETHING: That is a smoky coal. If you watch it burn, you will see great clouds of smoke coming from it. We ran in competition with the Bank Head, and found our coal was better three to one.

The WITNESS: My opinion is that all of the so-called anthracite coal in Canada is friable.

Mr. GETHING: It does not begin to give the results of our coal. Our coal is a smokeless coal; there is no soot in it; it stands all by itself. That is the opinion of the greatest coal people who have looked it over. It would not interfere with the other mines in the western part of Canada at all. Our coal is of a separate class. Our coal is smokeless, and will burn any place where anthracite will burn, and will replace the American anthracite.

The WITNESS: I cannot, of course, argue with an expert on coal. Mr. Dougall representing the Canadian Pacific, is very familiar indeed with all the coals of western Canada, and was in the business for many years, and he could give you a far better explanation than I can. Before I sit down, may I say that if I had the confidence of the last witness in the coal he owns, and there was a navigable river for part of the way, and a possibility of getting one million tons to a good market, I would not hesitate to promote the necessary number of railway miles involved to get it to a rail connection.

By Mr. Spencer:

Q. Are the freight rates with regard to coal such that they bring in a profit to the railway?—A. I do not know.

Mr. McLEAN (Melfort): How does this coal compare with the high-class coal at Lethbridge?

Mr. GETHING: Lethbridge coal is lignite, and I think it runs around fifty per cent fixed carbon—this is from memory—and one-tenth of one per cent water; ours is eighty per cent fixed carbon and around one per cent water.

Mr. J. DOUGALL: The gentleman made the statement that the coal at Bankhead was not anthracite coal and that the mines were run out. That statement is absolutely untrue. The Bankhead Mine is anthracite of the same quality as his own, only it is friable and very difficult to handle, like all the rest of the so-called anthracites of Alberta. When it comes down to the question of market, the difficulty with our Alberta coals—and I happen to be the owner of coal mines in Alberta myself—is that we cannot find a market. We have been trying to find a market for 20 years and the Government of the province of Alberta is considering at the present time some proposal to restrict the opening of new mines.

Discussion followed.

The Committee adjourned until Tuesday, April 5 at 11 a.m.

SESSION 1926-27

HOUSE OF COMMONS

SELECT STANDING COMMITTEE ON

RAILWAYS, CANALS AND TELEGRAPH LINES

Various Proposed Railway Routes for a Western
Outlet to the Pacific from the
Peace River District

REPORT OF THE COMMITTEE TO THE HOUSE OF COMMONS
AND MINUTES OF PROCEEDINGS AND EVIDENCE

No. 6—FRIDAY, APRIL 8, 1927

WITNESSES:

Premier Brownlee of Alberta

Mr. Calloghan, General Manager and Deputy Minister of Railways, Alta.

Mr F. H. Peters, Director and Surveyor General, Topographical Survey,
Department of the Interior

REPORT OF THE COMMITTEE TO THE HOUSE OF COMMONS

FRIDAY, April 8, 1927.

The Select Standing Committee on Railways, Canals and Telegraph Lines beg leave to present the following as its

ELEVENTH REPORT

Your Committee has considered the following resolution referred to it:—

That, in the opinion of this House, the time has arrived for the commencement forthwith, and the completion in the near future of a direct railway outlet from the Peace River Country to the Pacific Coast.

Your Committee, having heard evidence on the subject matter of the resolution from the Premiers of Alberta and British Columbia and from engineers who have investigated this project, and others, is of opinion that building a western outlet from the Peace River area is feasible from an engineering standpoint.

The weight of evidence before your Committee indicates that, on economic grounds, such construction should not be commenced forthwith, as set forth in the resolution referred to your Committee.

Your Committee is of opinion that much greater traffic development is necessary in the area to make the building of such outlet economically sound.

Your Committee is further of opinion that potentialities of that area are such as to warrant a continuous study of its development.

All of which is respectfully submitted.

A. M. YOUNG,
Acting Chairman.

MINUTES OF PROCEEDINGS

FRIDAY, April 8, 1927.

The Committee met at 11 a.m., Mr. Young (Saskatoon), Acting Chairman, presiding.

Present: Messrs. Anderson (Halton), Bettez, Blatchford, Bothwell, Bourgeois, Bradette, Campbell, Casgrain, Casselman, Charters, Cowan, Denis (Joliette), Denis (St. Denis), Donnelly, Duff, Dunning, Evans, Fafard, Fansher (Lambton East), Fraser, Gardiner, Geary, Girouard, Glen, Goodison, Goulet, Heaps, Hepburn, Hocken, Jelliff, Kay, Kellner, Kennedy, Lacroix, Laflamme, Lanctot, Lapierre, Letellier, Lovie, Lucas, Luchkovich, McKenzie, McLean (Melfort), McPhee, Millar, Milne, Morin (Bagot), Pettit, Pouliot, Price, Robitaille, Ross (Moose Jaw), Ryerson, St. Père, Sanderson, Spencer, Stewart (Leeds), Stirling, Totzke, Vallance, Wilson (Wentworth), Young (Saskatoon), Young (Weyburn)—63.

RESOLUTION RESPECTING PEACE RIVER DISTRICT RAILWAY OUTLETS TO THE PACIFIC

Premier Brownlee, of Alberta, was heard and questioned.

Mr. Calloghan, General Manager and Deputy Minister of Railways, Alberta, made a statement, and was questioned thereon.

Mr. F. H. Peters, Director and Surveyor General, Topographical Survey, Department of the Interior, was called and examined.

Witness retired.

The question being put on the Resolution, it was negative.

On motion of Mr. Ross (Moose Jaw),—

Resolved,—That the following be the Report of the Committee:—

Your Committee has considered the following resolution referred to it:—

That, in the opinion of this House, the time has arrived for the commencement forthwith and the completion in the near future of a direct railway outlet from the Peace River Country to the Pacific Coast.

Your Committee, having heard evidence on the subject matter of the resolution from the Premiers of Alberta and British Columbia and from engineers who have investigated this project, and others, is of opinion that building a western outlet from the Peace River area is feasible from an engineering standpoint.

The weight of evidence before your Committee indicates that, on economic grounds, such construction should not be commenced forthwith, as set forth in the resolution referred to your Committee.

Your Committee is of opinion that much greater traffic development is necessary in the area to make the building of such outlet economically sound.

Your Committee is further of opinion that potentialities of that area are such as to warrant a continuous study of its development.

Mr. Kennedy filed for the information of the Committee a book of photographic views of Peace River District.

The Committee adjourned to meet at the call of the Chair.

MINUTES OF EVIDENCE

COMMITTEE ROOM 231,

HOUSE OF COMMONS,

FRIDAY, April 8, 1927.

The Select Standing Committee on Railways, Canals and Telegraph Lines met at 11 o'clock, a.m., the Acting Chairman, Mr. Young (Saskatoon), presiding.

The Committee proceeded to the consideration of various proposed railway routes for a Western Outlet to the Pacific from the Peace River District.

THE CHAIRMAN: Gentlemen, this Committee some time ago agreed to adjourn until this morning for the purpose of giving Premier Brownlee of Alberta, and Mr. Calloghan an opportunity of being heard. I understand that they are both present, and I have the pleasure now of asking Premier Brownlee to address the Committee.

HON. MR. BROWNLEE: Mr. Chairman and hon. members of the Committee. I wish in the first place to thank the members of the Committee for giving me an opportunity, at this date in your session, to appear before you, on behalf of the Government of the Province of Alberta, with respect to the Peace River question, and the Peace River transportation problem.

The provincial government is, of course, very much interested in the deliberations of this Committee; first of all because as a province we have implicit confidence in the Peace River country and its potential possibilities from a development standpoint. Without attempting, at this stage at any rate, of what I have to say, to go into any argument as to the possibilities of the Peace River country, I may just say here that we do believe that there is a wonderfully fertile country lying along the Peace River Valley, and that it does promise a rich opportunity for development.

As a matter of fact, we believe that it may well become, with a little encouragement, one of the great granaries of empire. Besides that, the question of a Peace River outlet, by reason of the literature that has been published from time to time, the statements that have been made emanating from various sources, is to-day a burning question in that part of the province of Alberta lying north of the city of Edmonton. Then also I may say, that the people of the province of Alberta have been watching with very great interest the proceedings of this Committee, because we have been hopeful that, as a result of the question of the Peace River outlet and the Peace River transportation problem being referred to this Committee, some substantial steps may be taken which will lead to the development of that province from a transportation standpoint. And may I just say further, that the interest of the government of the province in the deliberations of this Committee is due to the fact that rapidly the question of the transportation problem in the Peace River country is becoming the outstanding question in the public life of the province of Alberta.

I do not think it will be too much of a digression for me to attempt very briefly to place before you a picture of the province of Alberta, with respect to its railway problems, in order that you may see first just why this question has become such an outstanding question in our public life; and secondly, in order that you may see the attitude of the province of Alberta towards the question which you are discussing in this Committee.

Now, speaking just as briefly as I may, and having due regard to the fact that you wish to close your discussion of this question this morning, I would like to go back and very briefly trace the history of our railway transportation problem in Alberta. Going back into the years before the war, we find that the province of Alberta, possibly being carried away with the over-enthusiasm of a young province, with many acres of agricultural land and vast deposits of mineral resources, was led into the mistake that has not been uncommon in Canada, or rushing into railway development. Besides the guarantees which the Government of the Province gave to the Grand Trunk and Canadian National lines—which have since been assumed by the Dominion of Canada—the province was led to encourage at least three different railway projects within the province.

The first on the list of our troubles is a railway project starting from the town of Lacombe, and proceeding westward from the present C.P.R. line from Calgary to Edmonton, into what is known as Blind Man's Valley. That is a line that had to be taken over by the Provincial Government, and to-day constitutes some 60 or 70 miles of railway development and represents to the province a capital expenditure of some three or four million dollars. It is entirely a colonization project. It is not paying its way yet, and as I say, we placed in that railway alone about three or four million dollars of an obligation when the McArthur interests undertook the building of the railway into the Athabasca district. The railway did not prove a success, and the province has had to take over that obligation, and we have to-day in the A. & G.W. road three hundred miles of railway, essentially colonization in nature, and with an obligation to-day, a liability of the province of approximately \$15,000,000. So that in these two roads alone, leaving aside the railway that enters into the discussion of the Peace River problem, we have two railway lines, one the Lacombe and Northwestern, with an obligation of from three to four millions, and the Alberta and Great Waterways with a total obligation to-day of approximately \$15,000,000. That railway, by the way, is not only not paying its way, but is not even paying operating expenses, and therefore, the province has had to assume the total interest on the capital obligations.

Later on, the McArthur interests were also encouraged under Government guarantee to build what is called the Edmonton, Dunvegan and British Columbia Railway, together with the branch line from McLennan, running to the Peace River, known as the Central Canada Railway. Again we have a railway project that was essentially colonization in nature, that did not pay its way. The promoters could not carry forward their obligations, with the result that in 1920, the Government of the Province again had to step in and attempt to work out the problem of this railway. As the result of long-drawn out negotiations, within the last 12 months, the Government has had to take over and assume the total liability for the entire road, and we have in the Edmonton, Dunvegan & British Columbia road alone a line extending 417 miles from Edmonton to Wembley on the Edmonton and Dunvegan, and 85 miles from McLennan to Whitla on the Peace River line, and to-day we have a liability as a province in those two lines, of approximately \$22,000,000. In other words, our total railway problem in the province of Alberta to-day constitutes a total obligation of approximately between \$42,000,000 and \$43,000,000. Each one of the three railway lines is a colonization line, each one is in the nature of a branch line, and acts as a feeder for the Transcontinental lines—either the Canadian Pacific or the Canadian National, and neither of those lines at the present time is paying operating expenses, the result being that the province to-day is called upon to face an annual interest charge to carry the bonds alone, of approximately \$2,000,000, as well as to take care of the maintenance, the building up of the repairs that are incidental to the maintenance of the road, as well as all other capital obligations, such as stock yards, and those various things that enter into the development

of a railway project, in order to adequately meet the needs and demands of the people.

Now, Mr. Chairman, I would like to leave that problem definitely before the members of this Committee in your consideration of the Peace River project; a total liability on the province of \$42,000,000 in railways, entirely colonization; an annual interest charge of over \$2,000,000 net to speak of the other items which we have to face annually. Therefore we in Alberta, the youngest of the provinces of Confederation, with a population of approximately 600,000 people, with an annual income from different sources of revenue of only \$12,000,000 all told—are obliged to-day to face this tremendous railway problem which has brought the province into this position to-day—which I have to admit quite frankly to the members of this Committee—that although we are the youngest province in Confederation, we have the highest per capita debt of any province in Canada, other than the province of British Columbia, which also has a very unusual railway problem.

Now, what is the result, what is the effect of this railway problem so far as the province of Alberta is concerned? Well, first of all it seems to me that it must be clear to the members of this Committee that a province of 600,000 souls, with a total revenue of \$12,000,000 and a railway obligation of \$42,000,000 cannot be expected to give the railway facilities to the people of the Peace River country which they must have, if that country is to be developed and make its contribution to the wealth of Canada that it is capable of making. That is the first thought that we are led to by reason of the railway problem of Alberta.

In the second place, may I say that from the standpoint of the whole province, this railway problem acts as a weight, an obstacle, which is preventing that development of the whole provincial life, which is so necessary if it is to take its place and make its contribution to the general wealth and prosperity of the Dominion of Canada. You who have studied Government finance will know that when a province with the total revenue which we have is obliged annually to sit down and consider that our first obligation is to find some \$2,000,000 for interest on railway bonds, and possibly another million dollars to make the necessary repairs, additions, and betterments that are necessary in railway management and development, we are obliged to survey carefully, and to view very carefully all the other demands that are made upon a provincial government, to give those educational facilities, highways and other facilities that are necessary if we are to have a truly advancing social life in our province.

I wish to leave this thought with you, urging it as strongly as I may, for your consideration, that a solution of the transportation problem of the Peace River will, with the relief that would come to the provincial Government, would reduce our problem, and not only develop the Peace River country, with all its possibilities, but remove one of the great obstacles and allow us to give better encouragement and development to this phase of our public life, which is necessary if we are to fill up the province of Alberta and have the economic development within that province that we all so much desire.

I would like you to keep in mind on this railway problem that Alberta has never had control of its lands, and that therefore, we have been responsible in no way for the homesteading policy that has been adopted in the province. We have not been able to regulate the inflow of population. At the same time, as you know, the province has no control over immigration. The result has been that our people have been encouraged to go into districts on the promise of railway facilities which, up to the present time, could only be supplied by the provincial Government.

I have in my hands a pamphlet that was issued by the Department of the Interior back in 1920, with respect to the Peace River country. I will not weary you by any lengthy reading from this pamphlet, but I would like to call your attention to three paragraphs only, which illustrate what I mean when I say that we have had no control over immigration, and could not regulate the effect which immigration policies might have upon the development of railways in the province. The first paragraph of this pamphlet reads:

The Peace River District of Canada has been for many years the subject of much interest and speculation. Alluring tales from adventurous pioneers of its wonderful resources, its charming climate and varying scenery, had long since lent to the district that charm of romance which distance and uncertainty blend with glowing promises. Now the land so long famed by legion and mystery is being proved a reality. Modern transportation has brought the district to our doors, and our keen searching trials and tests are proving it to be all and more than it was represented to be. The tales were not myths; the truth was not half told, and every day added treasures of the district are being unfolded to our eyes.

When we read over this pamphlet we find in several places suggestions made that railway facilities will be brought to the door of the settler in the Peace River country. For example, on page 26, in speaking of the British Columbia section, which is beyond the bounds of the province of Alberta, it reads:

With the coming of the steel, and the opening of coal and other mines, this district will develop very rapidly. To those not afraid to face a few years of pioneer work will come the opportunities which await the man on the ground, when the great movement sets in.

And then, when we turn over to page 41, we find under the heading of "Pouce Coupe"—and those of you who are familiar with the map of Alberta will know that the Pouce Coupe district is some very considerable distance beyond the end of steel of the Edmonton and Dunvegan—we read:

With railway facilities, this district promises to be one of the finest yet opened. Upon development of the coal and other resources of the upper sections of the Peace, and the completion of railway connection to the Coast, undertakings which are but a matter of time, the value of this section will be further enhanced.

In other words, as far back as 1920, we had, through Dominion Government literature, the encouragement given to people to go into the Peace River district and settle there many miles beyond the end of steel. Up to the present time, the province of Alberta, with its limited funds, its limited revenue, and its limited sources of taxation, has been called upon to give transportation facilities to those people who have settled in these outlying places.

Proceeding from the question of the problem which we face, and the money we have in the Edmonton and Dunvegan railway, I wish to point this out: We have in the years past made a number of extensions, but we have not come to the point where, we are practically at the limit of our resources—because, mind you, each of these three railways are crying for extensions. The Lacombe North Western people wish it to be extended fifty miles into the city of Edmonton. With the A. and G. W., we are being urged to extend that a number of miles northward. On the Edmonton and Dunvegan a number of extensions are necessary, but with this railway we have to-day reached the point where, even if we had funds to build extensions, we are at a loss to know what program to lay down in the nature of branch lines until we know what the definite policy is going to be with respect to the ultimate development of that line.

In the report of the engineers you will remember that three or four different lines are suggested, if we are to have a through line to the coast. There is the

cut-off to Obed. If that cut-off is made, it must appeal to you at once that it will affect the branch line program of the Peace River country. If the line is to be developed through the Monkman Pass, obviously the first extensions that are made should be extensions that will become a part of that line to go through the Monkman Pass. If, by any chance, the line should go through the Pine Pass or the Peace River Pass, again I say that the first extensions that are made, the extensions that are necessary to serve the people there now, would be affected by that policy, because those first extensions, in my opinion, should be extensions that are going to become part and parcel of the through line to the Pacific coast.

Therefore, I urge upon you—I think I am taking a reasonable view when I say that the provincial Government is handicapped to-day in facing the question of extension, because we do not know what direction or what the ultimate policy will be with respect to those routes. We might find that lines that we would lay down to-day would be duplicated in the near future, or might be practically worthless within a very short time.

It has been suggested in this Committee by some of those who have given evidence, that the development of the Pacific Coast outlet would involve taking over the E. D. and B. C. lines, that it would involve necessary extensions, and that that would mean a very serious liability to the people of Canada. Well, quite frankly, in the province of Alberta we feel that it would be entirely unfair to project a line through to the Pacific Coast and not make the present Edmonton and Dunvegan lines, which have been built into the Peace River district, part and parcel of that general system. I wish to point out to you to-day that that would not be a serious obligation to the people of Canada. I find that even with the reduction in rates, which we were obliged to put through some two or three years ago if we were to save that country at all and stop the people going out, as they were going out in 1923 and 1924, we still have a revenue of over one million dollars per year from the Edmonton-Dunvegan line. That line is to all intents and purposes a branch line. It simply feeds the transcontinental line: formerly the Canadian Pacific, but to-day the Canadian National. For example, on grain leaving from a certain point on the Edmonton and Dunvegan to Port Arthur, the division of freight may be on the basis of about eleven cents to the Edmonton and Dunvegan and about seventeen cents to the transcontinental line. I think that the engineers who are here will agree with me, that the cost of operating a branch line by itself is considerably higher, say, as far as the percentage is concerned, than the cost of operating a transcontinental line. Our costs of operation are higher in proportion than the costs of operation of the transcontinental line.

I think I am safe, therefore, in reasoning this way; if we have a revenue on the E. D. and B. C. line of approximately over a million dollars, that the Canadian National, which takes practically all of the shipments from the E. D. and B. C., enjoys a revenue of somewhere in the neighborhood of one million dollars, possibly more and possibly less. Inasmuch as they do not need any new equipment to handle that extra commodity, the percentage of profit which they would make would be very much higher than we would make on the E. D. and B. C. I have felt, and felt very strongly, that while the province of Alberta, on the basis of last year's operations, did lose \$150,000 in operation, at the same time the Canadian National Railways, or the Canadian Pacific, as the case might be, was making a substantial profit from the traffic which came from the E. D. and B. C. lines.

From the reports which have been handed to me from month to month, we feel that we will be able to better the showing that was made last year. I am not prepared to say to this Committee to-day just what we may do at the end of the year, other than to say that I am satisfied that we will wipe out the operating loss. If we are able to do that, and the Canadian National at the

same time is making a profit of from \$200,000 to \$300,000 a year from that traffic, then it seems to me that it is obvious that if these lines should be welded together and treated as one line, you would have a line that is paying considerably more than operating expenses, and that is making a very substantial contribution to the capital cost. Every hundred thousand dollars over and above operating expenses will pay the interest on at least two million dollars of capital obligation.

Although we have some \$22,000,000 or \$23,000,000 in the E. D. and B. C. Railway, we have not expected at all, if this road is taken over from us, that whoever takes it over will assume that total amount. We realize that we, as a province, will have to stand a great deal of the loss that has come from the accumulation of capitalization and deficits, and that we will probably have to turn that line over at a fair replacement value. And so reducing the cost of that line to a fair replacement value, my opinion is that, as part of the Canadian National System to-day, the loss would be so small that it would not be a serious burden on the transcontinental system, or on the people of Canada.

Now, may I point this out too. The engineers, in their report, have tried to show that the building of lines would at once involve the country in an expenditure for equipment. Well, facts are better than theory, and as against the theory that has been advanced by the engineers, I simply leave these facts with you. When we took over the E. D. and B. C. railway as a government line, about a year ago, and completed arrangements with the Canadian National, by which they would handle traffic coming off the line, we were in the position where we were without equipment, the Canadian National Railways on a day's notice were able to supply us with all the rolling stock, all of the engines, and practically all of the equipment which was necessary to operate the 417 miles of the E. D. and B. C., and the 85 miles of the Central Canada. They have been doing that since that time and we have not heard that they have had to buy any new equipment or that their operation of the lines has in any way been handicapped by taking over and adding to their problems the operation of the E. D. and B. C.

I am not going to enter into any controversy with the engineers, as to the details of their report, but I do wish to advance two or three general arguments which I think might be kept in mind by the members of this Committee.

First of all, dealing with the question of route. I am not an engineer, and I make no attempt to say here to-day what might be the best route through to the Pacific Coast, if it were decided to build an outlet to the Pacific Coast; except this, that, in so far as the report recommends the cut-off to Obed, I am entirely opposed to that. It seems to me that this is a temporary exigency only, and does not become part and parcel of a permanent transportation policy with respect to the Peace River.

I would like to associate myself with what was said before this Committee by the Hon. John Oliver, Premier of British Columbia, when he said, at page 40 of the evidence given on March 25th, that this principle should be laid down to railway development.

That in undertaking the future construction of railways in the Dominion of Canada, great care should be taken to see that that railway construction is so located that it will form part of a permanent transportation system, having in view the full development when the company is developed to its maximum. I want to state to you that there should be no railway construction at the present time that does not fit in with that principle.

It seems to me that you only have to look at the map to see that if the principle of that cut-off were followed you would have a small circuit on the easterly side to the Rocky Mountains that would not develop adequately the

area available for development in the Peace River, and that you would have to multiply miles of railway branch lines, and in the end, in my opinion, would be faced with such a capital obligation, as if the line were projected in a westerly direction, as is advocated by others who are interested in the Peace River problem.

Mr. EVANS: That is north of the Peace River?

Hon. Mr. BROWNLEE: I do not say that. I do say that one of the other routes, either by the Pine Pass or Peace Pass, or the Monkman Pass, in my opinion, is the proper solution of the problem, and not a cut-off on the east side of the Rocky Mountains.

Hon. Mr. DUNNING: Have you any choice between three, Mr. Brownlee?

Hon. Mr. BROWNLEE: So far as I am concerned, I am not here to make any choice between those three, because I think that is a question that should be left to the engineers. Mr. Calloghan is here and will express his opinion, and I have left it to him to express his opinion just as freely and as frankly as he wishes. I think he will advocate the Pine Pass. I may have a word to say about that in conclusion.

Now, my second criticism of the report of the engineers', is that, in my opinion, it presents to you an entirely inadequate picture of the Peace River country as it exists to-day. There is a schedule that is printed on one of the first pages of the report, which shows the average tonnage from the Peace River country at the present time as being 48,934 tons. The figures were prepared as a result of the average taken up to the year 1923. Now, it is a matter of common knowledge that the Peace River country, like all the rest of western Canada, has passed through an era of depression. It is also a matter of knowledge to those of us who live in Alberta that, when the high rates prevailed, for a time the development of the country was handicapped. Without wearying you with figures, I simply wish to give you one or two figures which indicate what the traffic from the Peace River country is to-day in actual facts. I find that for the crop year of 1926, up to March 21st—and that crop is not by any means moved out of the Peace River country—there were 3,710,877 bushels of wheat alone. I figured that at 111,300 tons, without considering any other commodity whatsoever. Of course, that is all export traffic. I also find that 1,054,000 bushels of other grains have moved out. I have not attempted to reduce that to a tonnage basis, but it would add at least 15,000 or 16,000 tons to the 111,000 tons of wheat. That does not take into consideration the constant development that is taking place in mixed farming; the increase that has taken place from year to year in the shipment of live stock. I find, for example, that in the live stock shipments we have had an increase from 1,038 cars in 1923 to 1,300 cars in 1925. I have not exact figures for the shipments last year. In other commodities, I find that the increase has been from 1,597 cars in the shipments into the Peace River country, to 2,947, and that does not take into consideration the local traffic. And in the same way I find that the local traffic outward from the Peace River is constantly increasing, and so I say that the traffic, from the Peace River country to-day, in my opinion, equals the minimum traffic that was set down on the pages of the report as the minimum traffic which should be considered for the minimum capital expenditure for the coast outlet. I would like to impress upon you members to-day that there is, at the present time, in the Peace River country, a very devided development. You can hardly pick up a paper at the present time in western Canada but you find that families are moving from the dry belt of Alberta to the Peace River country. In a copy of the Edmonton Journal of just a few days before I left Edmonton it was reported that 100 families were moving from the dry belt of Alberta, and part of the dry belt of Saskatchewan, into the Peace River country, and I think I only need

to bring to your attention the winnings of Herman Trelli in Chicago, when, for the first time in their great exhibition, the championship for both oats and wheat was won by one man who was exhibiting the products from the Peace River country.

Every paper sent to me from England shows that there is not one single thing being advertised so much as the winnings of Herman Trelli, with the result that, in the last two years, instead of people moving out, as they were before, they are moving back. We have had, this last year, the largest crop garnered in the history of the Peace River country, and I understand that the land under cultivation has been increased by forty or fifty per cent, so that we anticipate a much larger crop this year. But please remember that the crop of last year, which we estimated at somewhere around eight million or nine million bushels, has been grown on 270,000 acres of land, on a conservative basis.

Now, you have had evidence given to you here in this committee as to the total acreage of arable land in the Peace River country, ranging all the way from eight million to twelve million acres, of which it is estimated, on a conservative basis, probably forty per cent is cleared, and can be readily settled upon and broken up. It seems to me that that should be some indication to you of what may be shipped out of the Peace River country by way of grain alone, and that if given encouragement it is going to reach some permanent solution of its transportation problems. Of course, every bushel of wheat shipped out of that country means increased wealth and that means increased shipments of hardware, clothing, foodstuffs, and all of the other commodities that are needed for an agricultural population in an agricultural province.

Now, without delaying you much longer, there is just one other point that I would like to refer to, so far as the report of the engineers is concerned. It seems to me, from the standpoint of a layman, that the picture of what would be involved in a coast outlet, has been presented in an unusual and unfair way, and I say that in the utmost deference to the very able men who composed the report. In the first place, we find the cost under the heading of "Minimum and Maximum Traffic". When I took the figures of minimum traffic for the cut-off, and figured the cost per mile of the two hundred and some miles of new construction, I found that it ran up to what I considered to be a very extreme figure, and then when I took the maximum of some \$80,000,000, in order to complete the extensions which were necessary—some 800 miles of extensions, besides the new development work—I was quite unable to understand why the cost per mile should run so high. Upon reading the evidence given before the Committee, and the subsequent parts of the report, I saw that those figures had been computed by trying to estimate all of the improvements, equipment, and all of those things which might be necessary, by way of capital investment in the road, over a period of some 25 years.

Now, Mr. Chairman, I simply ask the members of this Committee in all fairness if, in the consideration of any railway project in Canada, that test has ever been applied? When the branch lines program of the Canadian National comes before the members of this House, do they supply you with an estimate of what the total cost may be over a period of 25 years? I think this presents an entirely erroneous picture. I note also that the initial cost of the new program consists of an estimate of what may be needed in the shape of equipment, rolling stock, engines, etc., and I do not think it is fair to estimate that on the basis of a new road. I have already told you what happened when the Canadian National arranged to handle the traffic over the E. D. and B. C.; they did it without any new equipment, and I think the proportion that is charged up against this road, either by way of initial cost for construction; or the maximum cost over a period of 25 years, is altogether too high.

As I say, the report, in my opinion, entirely fails to take into consideration what is in the Peace River country to-day, the traffic coming out of it to-day, and what will happen to that country if it is given the encouragement that would come if the Dominion government placed itself behind the railway problems of that country.

Now, I do not intend to delay you longer, Mr. Chairman. I have tried, in the first place to show you that the province of Alberta has such a railway problem to-day; that we simply cannot undertake, as a province, the development even of the arable lands within the province of Alberta; that we have come practically to our limit so far as railway extensions in the province are concerned, and that therefore, if that territory is to be developed, it must be undertaken by someone else outside the province. I have tried to show you very briefly—and I could elaborate upon those figures—that you have a much larger traffic coming out of the Peace River country to-day than is suggested in this report, and that there are wonderful possibilities of development of the Peace River country. I have tried to indicate to you one or two reasons why we think the report is unfair. I do not wish to may any appeal at all on the grounds of sentiment, but may I just conclude by saying that Premier Oliver, when appearing before this committee, touched upon the fact that this was the Diamond Jubilee year, and that certain questions should be viewed in the spirit of Confederation. I believe the Hon. Mr. Ralston used a somewhat similar argument in speaking to the Bill recently passed in respect to Maritime rights. With those statements I have no quarrel at all, but I come before you representing a new province, a small people who are struggling to develop the province, in order that it may take its place with the other provinces of Canada, and we come to you appealing to that sense of fairness which I believe is a controlling factor with all public men all over Canada. Is it fair, is it in the spirit of Confederation that the province, with its tremendous railway problem, should be called upon, to bear its share according to its population and its wealth, in all of these developments which are going on by way of public undertakings to-day, in various parts of Canada, in the development of the Hudson's Bay Railway—which gives but very little relief, if any, to the people of Alberta—with respect to the Bill of the Maritime rights—and I am making no quarrel with that at all—and at the same time should we be called upon to assume, in its entirety, a problem of developing a great part of Canada with its potential possibilities, one of the greatest grain growing territories and grain exporting territories of the Dominion of Canada? I would like to add my word, as representing the government of Alberta, that we think the promises which have been made to the Peace River country should be observed; that we think the time has come when there should be some start made in laying down a permanent policy with respect to this territory. Realizing the problems of government, I have not come here to-day, so far as I am concerned, to say that the entire coast outlet should be completed in any particular time. I think, to some extent, the actual completion might be left to the experience which is gained in the development of the present arable territory, but I do appeal to the members of this committee to take into consideration this problem, as a Dominion problem, so that the necessary extensions may be completed to adequately serve the territory that is available for development, and that it be made the basis of a well defined programme, which would have as its final solution the completion of an outlet to the Pacific coast.

Mr. Chairman, I am indebted to the members of the committee for the opportunity they have given me, and if there is any question dealing with the problem, which I have not touched upon, or if any member wishes to ask any questions, I shall be very glad to answer as best I can.

Mr. HOCKEN: If you had your natural resources transferred back to the province, would it put you in any better financial position?

Hon. Mr. BROWNLEE: No, sir; in viewing our natural resources problem we have always considered that possibly for a period of ten years we would be no better off financially than we are at the present time. In my opinion, it would give us no relief whatever, so far as the working out of the financial problems of the province are concerned.

Hon. Mr. DUNNING: Mr. Brownlee, I would like to ask you a question or two along the same line as those I addressed to Hon. Mr. Oliver. You know, of course, the terms of the resolution before the committee:

That in the opinion of this House, the time has arrived for the commencement forthwith, and the completion in the near future, of a direct railway outlet from the Peace River country to the Pacific coast.

Hon. Mr. BROWNLEE: Yes.

Hon. Mr. DUNNING: There is in the resolution no reference at all, of course, to the taking over of either the E. D. and B. C. of Alberta, or the P. G. E. in British Columbia. I understand you to take the same line this morning as the Premier of British Columbia, that the matter should be considered in a broad way, that the whole picture should be taken into account in evolving a policy; in other words, that the subject matter of the resolution was not, in Mr. Oliver's opinion, the whole story, but that other factors, notably the E. D. and B. C. in Alberta, an existing line, and the existing P. G. E. in British Columbia, should be taken into account. I gather that so far as Alberta is concerned, that you are expressing the same view?

Hon. Mr. BROWNLEE: To this extent, Mr. Dunning, that I think it appeals to the minds of the committee that we could not possibly have two lines serving the Peace River country; that with our present line going through a great part of the arable land, it would be entirely unfair to try to break that into two parts, and build another line through that country. The difficulty that would come from the through rates are apparent. In any event, it does seem to me that consideration would have to be given to the line that has already been projected, and is serving that territory. So far as the other end of the picture is concerned, I prefer to have nothing whatever to say about that to-day, because I would not wish to get into any controversy about that; but so far as the first part of your question is concerned, I say that I do think it would have to be part of the picture, and that you could not have railway facilities through to the coast, except as an extension of the present line.

Hon. Mr. DUNNING: It would involve, in your judgment, the taking over of the E. D. and B. C.?

Hon. Mr. BROWNLEE: Yes.

Hon. Mr. DUNNING: Suppose we follow the resolution literally, and leave out of consideration the E. D. and B. C., and suppose we decided to build a western outlet connected with the E. D. and B. C.; what effect would it have, in your opinion, upon the revenues of the E. D. and B. C.?

Hon. Mr. BROWNLEE: I do not think it would have any effect at all. Mr. Dunning, and for this reason; that while it might appear at first blush that the traffic which would be diverted over that line would be taking from the revenues of the present line, I am so positive of the potential development of the Peace River territory that I am satisfied that the increased traffic coming from the Peace River country would make up any loss that might appear to be sustained by the E. D. and B. C.

Hon. Mr. DUNNING: So you would not regard yourselves as injured from a traffic standpoint, if the Canadian National, or the government, agreed to complete the Peace River outlet without taking over the E. D. and B. C.?

Hon. Mr. BROWNLEE: My opinion is that we might be injured very temporarily, but the increased business which would come from the development of that territory would make it up. At the same time, I am satisfied that, from a railway standpoint, it would be left in an impossible situation, because —while I am not much of a railway man—from the experience we have had with the E. D. and B. C., I know what it means to have two different lines serving one territory, with all the problems that come with through freight and everything of that kind. May I say, Mr. Dunning, if I have not sufficiently answered your question, that I think in all of our negotiations, we have made it clear that we are concerned with the development of the Peace River country, and even if we did sustain a loss as a province, we would be willing to sustain that loss, because indirectly we would reap such large benefits from the rich development of the Peace River country.

Hon. Mr. DUNNING: Would it be a fair question—you do not need to answer it if you prefer not to—to ask you whether you consider this would be commenced forthwith as the resolution indicates, "The western outlet should be commenced forthwith."

Hon. Mr. BROWNLEE: So far as I am concerned I have tried to indicate —I may have failed in my argument that in my opinion, steps should be taken at once to lay down a program leading to the ultimate development of the Pacific Coast outlet. I think there should be some kind of a body gathered together, such as an independent Commission, to hear evidence as to the proper outlet. A definite program should be laid down that the route will go a certain way, and the necessary extensions should be made at once to adequately serve the territory. So far as the time of completion is concerned, I would prefer to leave that, to some extent at least, to those who are engaged in developing the route, having regard to the increased traffic that would come from a move of this kind.

Mr. COWAN: You mentioned, Mr. Brownlee, the three railways that the province has taken over. Are they operated by the province?

Hon. Mr. BROWNLEE: All of those three railways are to-day operated by the province, I am sorry to say.

Mr. EVANS: When you say that by future development of the Peace River country the province would eventually benefit enough to offset any drawbacks due to another outlet, have you in mind anything else except the agricultural development?

Hon. Mr. BROWNLEE: Yes, Mr. Evans, I do not want to take up the time of the Committee but I could trace the Edmonton Dunvegan and British Columbia on the North and show the possible development that can take place in the way of an increase in the lumber business and the tapping of certain coal deposits. While I am quite frank in saying that the coal problem of Alberta to-day is one of our great problems, because of our narrow market. At the same time as you know, we are trying to get some relief of that difficulty and we are trying to work out a policy by which the people of Canada would be self-contained from a coal standpoint. If we can work out that policy, then the coal deposits will become a real source of wealth to the province. We have not progressed very far yet in sending our coal to the ports of British Columbia for bunkering purposes, but we believe that can be done and when it is done, then the coal will become one of the great resources of the territory.

Mr. EVANS: What do you say about the efforts that are now being made to find a market for the coal down here?

Hon. Mr. BROWNLEE: I fully appreciate that, and no one knows better than we do the problem we have tried to solve in the production and sale of coal in Alberta.

[Premier Brownlee.]

Mr. FRASER: Can you say what cash subventions have been provided by the Dominion of Canada for the construction of lines of railway you have indicated, that the province has built for the development of the Province of Alberta?

Hon. Mr. BROWNLEE: The Dominion Government has not given any subvention for the Lacombe Northwestern, no subsidy or subvention for the Alberta and Great Waterways. For the 417 miles of the Edmonton Dunvegan and British Columbia, and the 85 miles of the Central Canada, they gave us a subsidy of \$6,000 per mile for 50 miles only, some years ago, and then it was discontinued. We have had no other assistance from the Dominion whatsoever.

Mr. FRASER: Have you any idea what the reason for the removal of that assistance was?

Hon. Mr. BROWNLEE: I am not sure, unless it was the general policy of the Dominion Government not to give further railway subsidies.

Mr. KENNEDY: Having regard to the map on the wall, can you indicate the three railways that are controlled or owned by the province of Alberta?

Hon. Mr. BROWNLEE: Yes, sir, I think I can. This (indicating) is what is called "The C & E." the Calgary and Edmonton line of the Canadian Pacific Railway. Starting from Lacombe on that line, we have projected this line (indicating) some 60 miles into what is known as the Blind Man's Valley, a fairly well settled territory. We are asked now to complete that into the city of Edmonton, which will require another 60 miles and mean a million or a million and a half dollars.

Starting from the city of Edmonton, we have this line (indicating) traced in black up to Fort McMurray, three hundred miles of road, and \$15,000,000 in cost. That is the Alberta and Great Waterways, running up into Athabaska.

Then we have the Edmonton, Dunvegan and British Columbia, as you see it there (indicating).

May I say, there is one other point I have forgotten. We have also, from a place near Busby, started a branch line, or financed a branch line of 52 miles, and we are being urged to extend that another 25 miles into that district.

Hon. Mr. DUNNING: Mr. Brownlee, which is the Central Canada?

Hon. Mr. BROWNLEE: That is a northern Branch, starting from McLennan and running up into Peace River, 85 miles of branch line of the Edmonton, Dunvegan and British Columbia.

Hon. Mr. DUNNING: And the Government of Alberta now owns and operates all those lines?

Hon. Mr. BROWNLEE: We now own and operate all those lines.

Hon. Mr. DUNNING: But you are not trying to sell us the Lacombe and Northwestern?

Hon. Mr. BROWNLEE: Seriously speaking, we think that the Canadian Pacific Railway Company should take over the Algoma and Northwestern, because as you see, it is a branch from their line. They get all the traffic that comes from that territory, and we think that inasmuch as they get the benefit of the long haul from all that traffic, they should assume the branch. But we do not ask the Dominion Government to give us any relief so far as that line is concerned.

Hon. Mr. DUNNING: And as to the Alberta and Great Waterways, that is not in the picture you are stating this morning.

Hon. Mr. BROWNLEE: No, sir.

Mr. BRADETTE: Mr. Brownlee, I know by my own experience in reference to a provincial line of railway in the northern part of Ontario, that the province of

Ontario would not sell that railway under any consideration. I do not see why that principle should not apply to the province of Alberta. The Temiskaming Railway has already cost the province of Ontario, \$5,000,000 but they would not part with that railway under any circumstances.

Hon. Mr. BROWNLEE: May I just reply to that sir, by saying that in the first place the province of Ontario had a population of 3,000,000 as compared with our 600,000, and has an annual revenue of somewhere about \$35,000,000 or \$40,000,000, as compared with our \$12,000,000. That railway has been developed in connection with and has furnished running rights to the Canadian National, so that it has a source of income which we cannot expect to get for our railways which are branch lines pure and simple.

Mr. BRADETTE: It runs through a part of Northern Ontario which is very sparsely settled and where we have millions of acres of agricultural land open for settlement in competition with the immense areas open for settlement in western Canada.

Hon. Mr. BROWNLEE: It is simply a question of carrying it and we have not the capacity to do that, in our small province. You can see just what it would mean if we tried, out of our \$12,000,000 of revenue, to take care of \$2,000,000 of interest annually. We cannot do it, and so we have been pyramiding that debt by adding it to our capital debt, and now we have come to our limit.

Mr. ANDERSON (Halton): May I suggest that the province of Ontario has a double motive in building this railway; to increase its resources, which does not apply in the same measure to Alberta.

Mr. JELLIFF: May I ask Mr. Brownlee, if in his opinion it would not be better to pass a resolution favourable to the facilitation of the Peace River outlet, with a recommendation that a Committee be appointed to investigate the routes, rather than to pass a resolution to forthwith proceed with a route.

Hon. Mr. BROWNLEE: I would rather not say what the Committee should do. I have tried to place our picture before you, and it simply becomes a question for this Committee as to whether the Peace River country is going to be, or can be, developed in the next five years or not.

Mr. EVANS: Do you not think, Mr. Brownlee, that the Peace River country to-day is suffering from the fact that the people of Edmonton tried to make their city a great centre, instead of serving the people from an agricultural standpoint.

Hon. Mr. BROWNLEE: No, I do not think so, Mr. Evans. I do not think so at all. As a matter of fact, I may say that from the standpoint of the Provincial Government, the city of Edmonton does not enter into our consideration at all in the development of the Peace River. I have been up through that country, and there is no part of Canada in which I have a greater faith, so far as its future development possibilities are concerned, than I have in the Peace River district.

Mr. ANDERSON (Halton): Do you not think the Canadian National Railways should develop this as part of their system?

Hon. Mr. BROWNLEE: If the Canadian National took over the present project, assumed the obligation of attending to all of the needs of the Peace River country and were left to exercise their judgment, that might be a solution. May I call your attention to this fact—I have not mentioned it before—that you have a part of the Canadian National Railways from Red Pass Junction to Prince Rupert, 600 miles, in which there is an investment of conservatively \$70,000,000, which has absolutely no feeder in Canada unless it is the Peace River country. That line must be losing from \$2,000,000 to \$3,000,000 a year on a conservative basis. It may be true that the Canadian National to-day, under their present arrangement, is getting the benefit of the traffic from the

Peace River country, but they would not get that possibly, if by any chance the Canadian Pacific Railway got the Edmonton, Dunvegan and British Columbia line. I fail to see personally how Canada can possibly supply the traffic of that 600 miles of the Canadian National road unless it gets control of the Peace River country. That is a consideration from an economic standpoint.

Hon. Mr. DUNNING: On that point you are aware of the fact that the proposed western outlets, with the exception of the Obed route, all connect with the Canadian National at Prince George.

Hon. Mr. BROWNLEE: Yes.

Hon. Mr. DUNNING: You know on that basis and according to the engineers' report, it would be just as well practically for the Canadian National to take the produce of the Peace River to Vancouver as to Prince Rupert.

Hon. Mr. BROWNLEE: That might be, but on the other hand, there is the possible development of a port at Prince Rupert.

Hon. Mr. DUNNING: That obtains in any case.

Hon. Mr. BROWNLEE: My point is that it cannot obtain unless there is some linking up through the western lines with the Canadian National.

Mr. ANDERSON (Halton): What is the mileage of that line to the Peace River?

Hon. Mr. BROWNLEE: I could not say that.

Hon. Mr. DUNNING: It depends on which route is followed.

Hon. Mr. BROWNLEE: Mr. Chairman, I do not wish to detain the Committee further.

The CHAIRMAN: Gentlemen, Mr. Calloghan is here; we have sent for him, and we will hear him. I might say that the Committee is anxious to hear you, Mr. Calloghan, and if you can make your statement as short as possible, without leaving anything material out, we will be obliged. I should say, gentlemen, that Mr. Calloghan is the Deputy Minister of Railways for the Province of Alberta, and I understand is manager of the lines there.

Mr. CALLOGHAN: Mr. Chairman and hon. members of the Committee: With your permission I will read a statement in regard to this Peace River outlet problem. (Reading):

I am appearing on behalf of the E. D. & B. C. and Central Canada Railways. The lines of these companies have been constructed from Edmonton to their present termini with funds obtained from the sale of bonds guaranteed by the Province of Alberta and with advances made in the form of loans by the Province and are vitally interested in the route by which a westerly outlet is provided from the Peace River District to the Pacific Coast.

To plan, finance, construct and operate on the most economical basis the additional lines of railway necessary to adequately serve the agricultural, timber, fuel and mineral resources in this territory should be a national, rather than a provincial problem. These are really colonization roads and their construction should have been undertaken by the Dominion Government in the first place. The natural resources that are served by these railways in the Province of Alberta now belong, or did belong to the Dominion Government and were disposed of under Dominion Government control. The Dominion Government has some 3,500,000 acres of agricultural, coal, mineral and timber lands in the Peace River block of British Columbia which require railway transportation facilities to serve the settlers now there and for

[Mr. Calloghan.]

the proper development of its vast resources, now inaccessible through lack of adequate transportation facilities. A treatment of the question of transportation to serve and develop this region requires careful studies of topography areas that are now productive or reasonably capable of being made productive and existing rail routes.

The Pine Pass has for many years been known to possess extremely desirable advantages as a railway route through the Rocky Mountains, its summit 2,850 feet above sea level, is the highest elevation that would require to be reached by railway using that route in passing from the Arctic to the Pacific watershed. It is unquestionably a pass through the Rocky Mountains and owing to its low elevation and the favourable natural conditions for railway construction and maintenance on both sides of the summit, Pine Pass is of great importance when considering the route for a railway by which to develop the Peace River region in Alberta and British Columbia, from Edmonton.

From Edmonton by way of the E.D. & B.C. Railway to Spirit River and then through the Pine Pass to Prince George, the railway would traverse a productive territory or one that is susceptible of being made productive for almost the entire distance of 701 miles.

The ruling gradient by this route from Edmonton to the British Columbia boundary, 411 miles, would be 0.5 per cent in either direction.

Hon. Mr. DUNNING: What is the mileage of your present railway line?

Mr. CALLOGHAN: Three hundred and fifty-seven to Spirit River.

Hon. Mr. DUNNING: What about the coal in the Peace River Pass, if you went through the Pine Pass?

Mr. CALLOGHAN: The line crosses the coal measures on the way to the Pine Pass, just the same as if it went through the Peace Pass. (Reading):

From the Alberta-British Columbia boundary to Prince George, 290 miles, the ruling gradients would be 0.75 per cent, against west bound traffic and one per cent against east bound traffic.

Hon. Mr. DUNNING: Before you leave those gradients, Mr. Calloghan, what do you base your statements on?

Mr. CALLOGHAN: From an examination by the engineers.

Hon. Mr. DUNNING: An instrumental survey?

Mr. CALLOGHAN: Yes, the Grand Trunk Pacific made an instrumental survey through that country in 1905, and I have had their maps.

Hon. Mr. DUNNING: Is that mentioned in the engineers' report that is under consideration by the Committee?

Mr. CALLOGHAN: I have not read their report.

Hon. Mr. DUNNING: You have not read that report?

Mr. CALLOGHAN: No, I have not read the entire report.

Hon. Mr. DUNNING: Information regarding the Passes is contained in it. That is what I meant.

Mr. CALLOGHAN (Reading):

Grading on the E. D. & B. C. railway was completed to the British Columbia boundary but the main line is in operation only to Spirit River, 357 miles from Edmonton. The additional investment required for construction to complete the railway from Spirit River by way of Pine Pass to Prince George would be Spirit River to British Columbia Boundary, 54 miles, \$1,141,000; from the British Columbia Boundary to Prince George, 290 miles at \$38,000 per mile, \$11,020,000 making a total of \$12,161,000 to complete the line to a junction with the tracks of the Grand Trunk Pacific at Prince George. This would be the most feasible

[Mr. Calloghan.]

route for the movement of all traffic to or from the Peace River country, the inter-mountain territory of British Columbia and destinations on the Pacific Coast.

Hon. Mr. DUNNING: Just there, Mr. Calloghan, you gave construction cost figures. What is the basis of the cost figures?

Mr. CALLOGHAN: That is by a careful examination of the route.

Hon. Mr. DUNNING: A careful examination of the engineer's report of the Grand Trunk, which you referred to before?

Mr. CALLOGHAN: Yes, I have got these figures. I had the advantage of getting an estimate from the man who was in charge of the survey for the Grand Trunk Pacific, Mr. Thomas Taylor; and I have also had the advantage of figures from the engineer who examined this report for the Canadian Pacific Railway.

Hon. Mr. DUNNING: What engineer of the Canadian Pacific Railway?

Mr. CALLOGHAN: C. R. Crysdale.

Hon. Mr. DUNNING: Your total cost figures over the Pine Pass are \$12,000,000.

Mr. CALLOGHAN: Yes, sir, the total costs are \$12,161,000.

Hon. Mr. DUNNING: That is from Spirit River?

Mr. CALLOGHAN: From Spirit River to Prince George.

Hon. Mr. DUNNING: A completed line?

Mr. CALLOGHAN: Yes.

Mr. KENNEDY: Can you point that out on the map, Mr. Dunning?

Hon. Mr. DUNNING: I will try to. This (indicating) is Pine Pass, is it not?

Mr. CALLOGHAN: I think it is further along.

Hon. Mr. DUNNING: It is in that neighbourhood, anyway?

Mr. CALLOGHAN: Yes, it is on this side of those lakes.

Hon. Mr. DUNNING: That indicates it sufficiently close.

Mr. CALLOGHAN (Reading):

The present rail route from Edmonton would be a satisfactory connection and outlet to the east. This proposed line from Edmonton to Prince George would be practically in accord with the original plan of the Grand Trunk Pacific to construct their main line from Edmonton through Grande Prairie and Pine Pass to the Pacific Coast. It is difficult to understand how the Grand Trunk Pacific line from Prince George to Prince Rupert can be justified unless it obtains the traffic that would be derived by developing the resources of the Peace River country through railway extension from Prince George by way of Pine Pass to a connection with the E. D. and B. C. Railway.

The Pine Pass route would pass through the Kootenay Formation in which all the anthracite and bituminous coal measures of eastern British Columbia are located.

The records of analysis and tests made by the Canadian Pacific Railway in 1923 from coal obtained from the Gething properties in the Peace River block indicates that the coal in this area is of a very high grade and considerable traffic should be derived from this resource.

Full consideration of the problem presented and the requirements to be met indicate that the Pine Pass route, as an outlet to the Pacific Coast, should be adopted as this route lends itself to the most economical development, having in view the Peace River district in Alberta and British Columbia, as a whole. Furthermore, this plan is in accord with

[Mr. Calloghan.]

the natural evolution of railway construction. In new regions, the first lines of communication established are always those built on an arterial plan. I do not know of any new territory that carries better possibilities for future advancement and the Dominion Government should take a leading part in its development by taking over the E. D. and B. C. Railway and constructing the additional railway mileage required to provide a Western outlet for the Peace River country, the settlement of which is so actively encouraged.

I have here records left in the E. D. and B. C. office by the Canadian Pacific Railway Company, showing tests that they made on coal from the Peace River block.

By Hon. Mr. Dunning:

Q. Referring to the route which you recommend, the Pine Pass route, I understand that you have not read the report of the engineers?—A. I have not read it completely, no; I saw part of it in an engineering journal.

Q. But you have not read it completely?—A. I have not had a chance to read it.

Q. I understood you to say the Pine Pass offers the easiest gradients?—A. I do not know as I said, "easiest gradients."

Q. The lowest elevations, or easiest gradients; something of that description. You thought it best. The reason I ask the question is because the other engineers did not give us the details on the Pine River, giving as their reason that the Peace River Pass had advantages in one direction, and the newly discovered Monkman Pass had advantages in another way over the Pine Pass. I wanted to know if you had taken those factors into account?—A. The Peace Pass permits the location of an arterial line, as it were.

Q. What is an arterial line?—A. I would call it a through line.

Q. Is not this proposal a through line; do you not want to build a through line through the Pine Pass?—A. Yes.

Q. Well, what is the difference?—A. That is what I say. The line should be a through connection westerly; the other one requires a back haul.

Q. The Pine would require a back haul?—A. No, the Pine gives a straight away haul.

Q. How would the Pine serve the country north of the Peace?—A. That is another problem, for any line that is adopted south of the Peace. The country is divided by the deep valley of the Peace River, which is some 800 to 1,000 feet deep.

Q. Have you examined the Monkman Pass?—A. No, sir.

Q. But you are of the opinion that the Pine Pass is superior to it?—A. Oh, yes.

Q. Why?—A. Because of its lower elevation, and the line would avoid the rough mountain country that it would have to pass through if it went over the Monkman. There is less waste land on a line through the Pine Pass than there would be on the other land.

By Mr. Kennedy:

Q. Could you serve the north side of the Peace with a branch line system in connection with the Pine Pass route?—A. Yes, I would build from Whitla.

By Hon. Mr. Dunning:

Q. Would that not involve a back haul?—A. No, that would cross the river at Hudson Hope. A connection could be built from the present end of the Central Canada Railway at Whitla to merge with this Pine Pass route within a distance of 250 miles, I estimate, and in that way the extensions from both the Central Canada and the E. D. and B. C. could be completed and give a direct westerly outlet from the Peace River country for an expenditure of \$20,161,000.

[Mr. Calloghan.]

By Mr. Kennedy:

Q. You have been in charge of railway construction in the Peace River country?—A. Yes.

Q. During the last few years?—A. In 1923, and 1924 we completed about thirty miles.

Q. What is the cost of construction there?—A. It averaged \$25,000 a mile for the thirty miles.

By Hon. Mr. Dunning:

Q. Is that branch line construction?—A. Yes.

Q. What is the weight of steel?—A. We laid 56-pound steel.

Q. 56-pound steel?—A. Yes.

Q. You are not suggesting that that would cover the construction of a western outlet?—A. Well, I would not suggest that that was a guide for the cost of the steel; I am figuring on 80-pound steel for this construction through the Pine Pass.

Witness retired.

F. H. PETERS, called.

By Mr. Kennedy:

Q. Mr. Peters, will you kindly tell the Committee what your position is here in the Topographical Surveys?—A. Surveyor General in the Interior Department.

Q. Have you knowledge of clearing land of brush by fire in the Peace River country?—A. We made a number of experiments in that sort of work in 1919, 1920 and 1921.

Q. Will you tell the Committee what the cost of clearing that land was?—A. Well, these experiments were made on different pieces of land and under different weather conditions. They showed that if you can select large areas of land that are suitable for clearing with burning, each burn would cost from three to fifteen cents an acre.

Q. When you say large areas, how large an area do you require?—A. Well, I would say two or three townships.

By Hon. Mr. Dunning:

Q. Mr. Peters, when you say three to fifteen cents an acre for clearing, do you mean that that would completely dispose of the surface brush, completely destroy it?—A. No, I think you would have to handle it for several years and make two or three burns, so that in the end your cost of clearing it to the shape you speak of, would run up to something under a dollar an acre.

Q. What did you do with the roots in your experiment?—A. Well, we only worked on it for two or three years. When we left I think the roots were still there, but, of course, to get rid of them you would have to take seven or eight years.

Q. If you were a farmer clearing, would you not include in your cost the getting rid of the roots?—A. Yes. To carry out this operation of clearing land with burning fires, you would have to take a period of time, you see, and in that period of time I think you would have burnt most of the stumps out; they are soft wood.

By Mr. Ross (Moose Jaw):

Q. In your opinion, could that land be cleared for less than \$100 an acre?—A. Yes.

[Mr. F. H. Peters.]

Q. For agricultural purposes?—A. Yes.

Q. How much less?—A. Well, according to this system of burning by fire on selected areas, by \$99 less.

By Mr. Bradette:

Q. I am actually a farmer in Northern Ontario, and it costs us \$135 an acre to clear for cultivation, taking the stumps out of the ground?—A. \$135? You cannot do it for less than that?

By Mr. Gardiner:

Q. What kind of timber is there on this land you speak of?—A. Poplar, I would say, in general.

Q. All Poplar?—A. Well, generally, yes.

Q. And you think that after burning over for say three or four different times, the ultimate cost of clearing that land would not be very great?—A. No, something under a dollar an acre.

By Mr. McLean (Melfort):

Q. Would you mind telling the Committee the size of the timber you cleared at a cost of three to fifteen cents an acre?—A. Well, that is a very hard question to answer; up to six and seven inches, possibly up to eight inches.

Q. How thick would that stuff be growing?—A. Well, it would be fairly sparse.

Q. Plenty of grass?—A. Yes. That is the essence of the whole matter; you cannot burn unless there is a sufficient amount of grass to get a good fire.

Q. You are not dealing, then, with the land the engineers told us about the other day, where it is heavily wooded?—A. Well, I did not hear what they said. I am speaking of fairly heavy timbered land.

Q. You are speaking where there is an odd tree?—A. Oh, no, more than that.

Q. How often would you require to burn that?—A. Well, to finally clear the land, I think you would have to make three burns.

Q. At what time of the year do you burn it?—A. It would have to be in the spring, so as not to hurt the soil.

Q. Would you be able to pick up the roots left after it was burned; what would it cost to pick up that stuff alone?—A. Well, I did not figure on picking it up.

Q. You would not pick it up?—A. No.

Q. How would it be gathered into piles?—A. You would not do that. You would make the first burn and then you would let the territory go for a year or two, until you got another good growth of grass. Then you would make another burn, and you would do that again until you had it cleared up. It would take a little time.

Witness retired.

Mr. KENNEDY: I would like to file for everybody's information some photographs of the Peace River country.

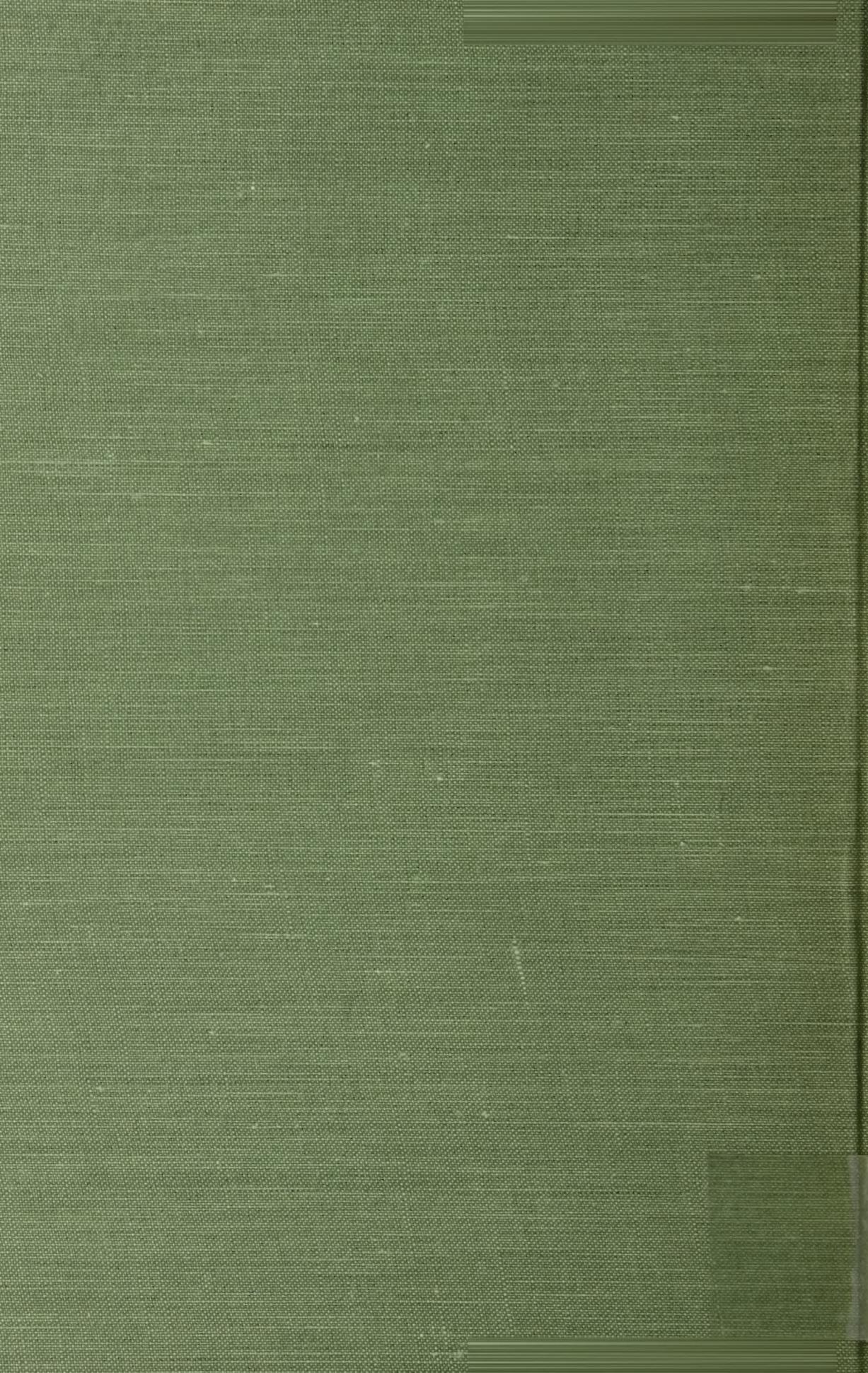
The CHAIRMAN: The resolution that was presented to the Committee reads as follows:

That in the opinion of this House the time has arrived for the commencement forthwith, and the completion in the near future, of a direct railway outlet from the Peace River country to the Pacific Coast.

Resolution negatived.

The Committee adjourned.





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